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THE WEEKLY NORTHWESTERN MILLER

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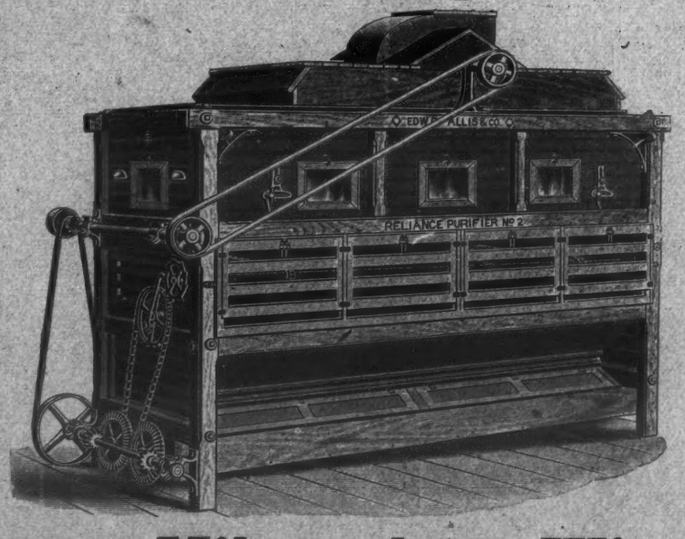

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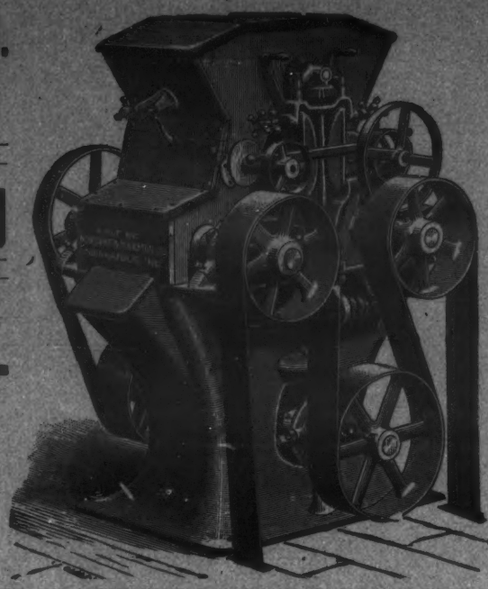

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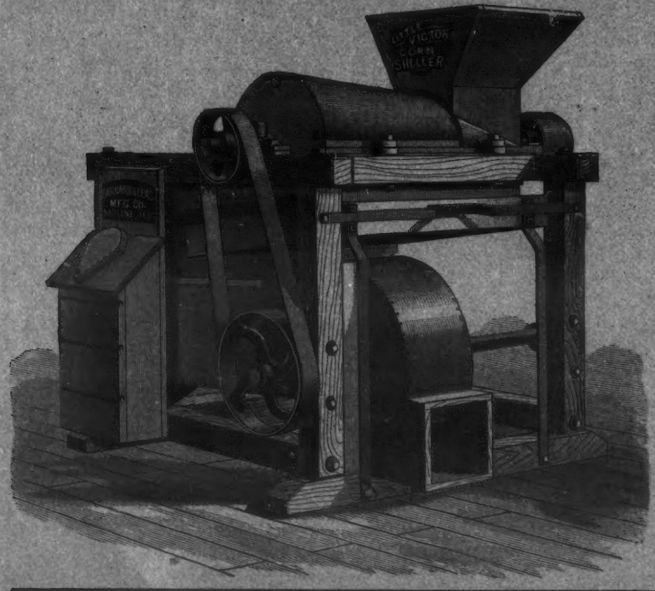

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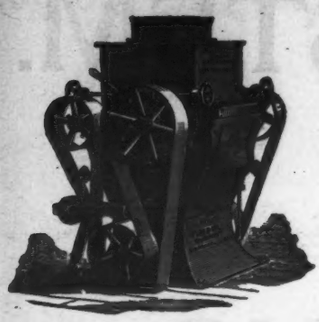

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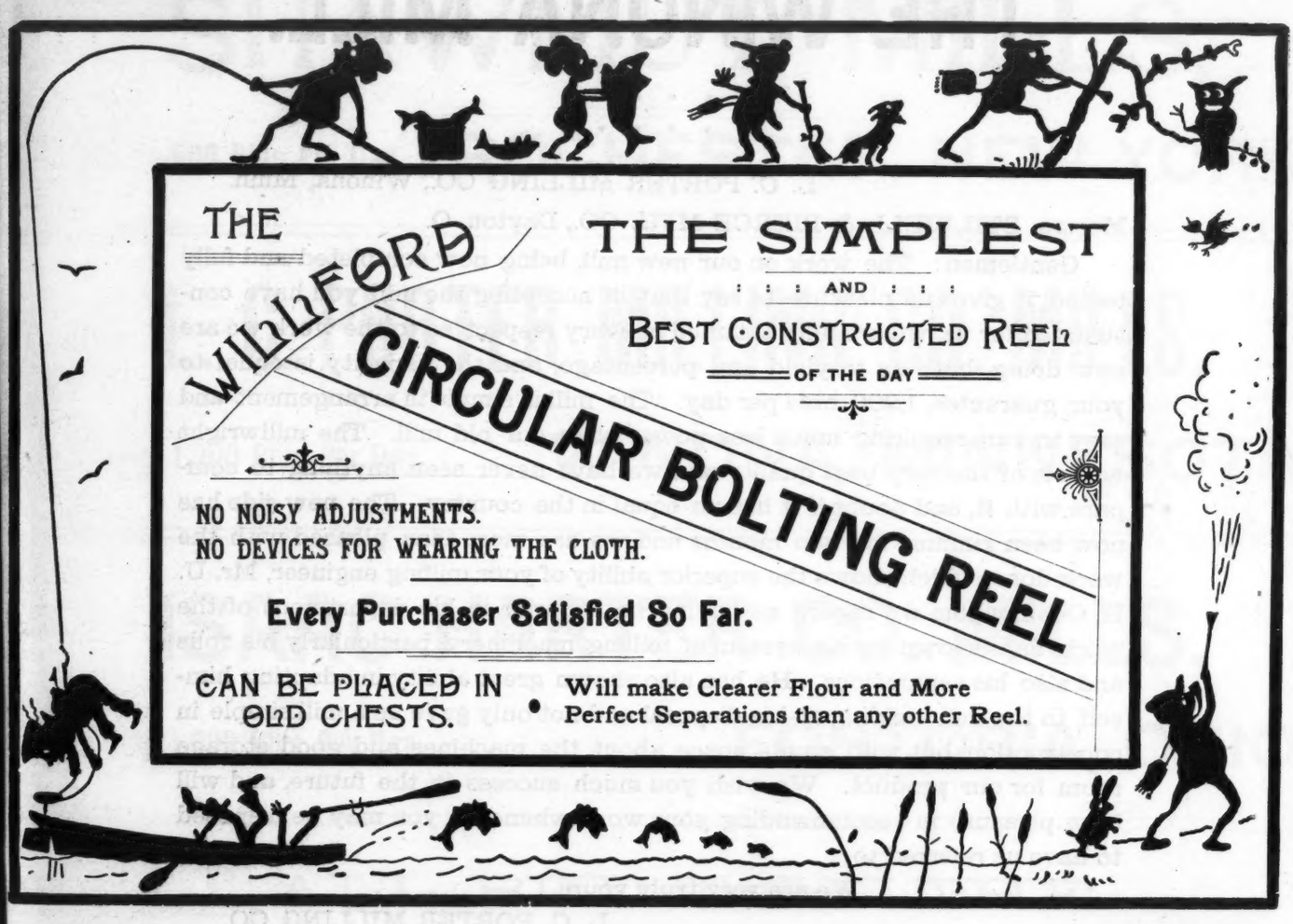

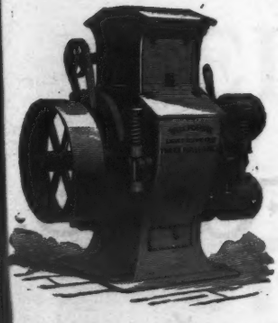

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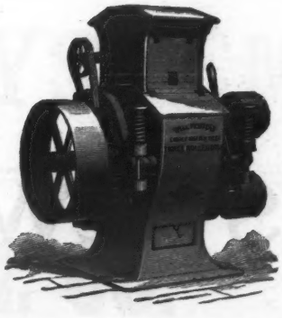

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ILLINOIS STATE MILLERS' ASSOCIATION.
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FRIDAY, FEBRUARY 24, 1888.

THE WEEK.

The Minneapolis mills made 114,100 bbls of flour last week and exported 55,000 bbls. The market is steady but not active.——The St. Louis mills made 68,700 bbls last week. The market has been more active and the output will be larger this week.——Our Glasgow cable reports flour very dull and quotations nominal. ——Our Boston telegram shows a better movement, but buyers are still slow and cautious.—— Our winter wheat crop report is not very favorable, the worst features appearing in the region of heaviest production.——Our eastern correspondents, with the exception of Boston, continue to report wheat strong and flour low and dull.——The Nebraska and Fox River Valley associations met last week.——St. Louis millers are struggling to abate discriminations by railways in favor of Texas millers.——The British National association voted down the resolution asking parliament to place a duty on foreign flour.——Thirty-nine Northwestern mills outside of Minneapolis made 359,694 bbls flour in January, as against 338,576 bbls for the same month in 1887. These mills exported 91,443 bbls in January, against 70,006 bbls in that month last year.

OUR regular report on the condition of the winter wheat crop, which appears elsewhere in this issue, is far from reassuring to the millers who have been disappointed by light and poor crops for some years past. We are not inclined to consider this report as a final proof that the 1888 crop is to be light and poor, but it is not at all favorable as a whole, and is calculated to send a shiver through the frames of the bear element in the speculative markets. We are not, however, publishing these reports for the purpose of influencing values, but merely to give the millers and the trade in general comprehensive and reliable information as to the prospects of the crop. That these reports are entirely worthy of credence is a fact which will be fully demonstrated later on.

* * *

WHILE we are on the subject of crop reports, we desire to be placed on record as not putting implicit confidence in the reports of any man or set of men. Those who compile and summarize the views of thousands of correspondents, no matter how fair minded they may be, usually allow themselves to be swayed from the path of disinterested scrutiny by the positive declarations of certain writers, hence it is always safe to give the crop the benefit of any doubt one may feel, in perusing these reports. That such an opinion is justifiable has been clearly demonstrated year after year by close observation of indications and results. We have seen vast areas of wheat freshen up and turn out an immense yield of fine grain, after experienced observers had declared the entire crop to be a failure, or had estimated that the yield would be a small percentage of an average crop. This having been observed in some cases, may prove to be true in many more, hence we feel justified in using a modicum of allowance for error every time we read a crop report, no matter how positive its wording or how high the reputation of its compiler.

* * *

THE agitation for the establishment of wheat buying syndicates by the English millers in Dakota and Minnesota is still continued in the columns of the London *Miller*, that journal seeming to regard this as a sovereign panacea for all the woes of English millers and a complete block to the American flour trade with Great Britain. Our contemporary estimates that the English millers could pay the Dakota farmer ten cents per bushel more than he is now getting, and could lay the wheat down at the mill five cents cheaper than its present cost, in addition to the advantage of getting a pure hard wheat, in place of the mixture now sold abroad as No. 1 hard. We dislike to use harsh terms or sarcasm, but cannot help saying that such ideas are wholly fallacious, as well as foolish. No probable, not to say possible, combination of foreign wheat buyers can outbid the wheat buyers of this country. No syndicate can build and operate elevators to better advantage than can our capitalists. No combination of British capital and brains can kill our flour export trade with the United Kingdom. Every advantage is in the hands of the American trade, and the organization of any scheme similar to that proposed by our London contemporary can only result in trouble and loss to the financial promoters.

* * *

OUR contemporary takes the greatest delight in quoting from the editorials of an obscure Dakota weekly and the letters of one of its correspondents. It is not known in London, of course, that the bread and butter of scores of rural editors depends upon the vigor with which they abuse the millers, elevator owners and railroads, and advocate the inauguration of profitless and chimerical schemes such as our London contemporary has been talking about for so long. It is also true that there are scattered throughout the northwest, farmers who find ample time during the long winters to wield the pen in formulating such schemes and in growling at the men who buy their wheat and the lines which haul it. We do not deny that these farmers have grievances, but we do know that they are slowly but surely being regulated and that whatever of injustice has been done in the past must be regarded as incidental to the opening of a new country and as a means to a good end, in that the presumably excessive profits of capitalists who go to the frontier to open up the country are necessary to requite them for the risk they incur.

* * *

THE London *Miller* heads its article on this subject "Land Ahead." We fear the shipwrecked British millers will find this speck of land which they fancy they observe on their dark horizon, a mere optical delusion.

* * *

THE millers of St. Louis have for some time been trying to secure fair rates on flour to Texas points. The railways recently made a new tariff, putting a higher rate on flour, so that Texas millers can buy wheat in St. Louis and ship it at so low a rate as to enable them to undersell St. Louis millers in the Texas markets, although both pay the same price for wheat. There is no justice in such a policy and we think that our friends will be able to secure a new deal on the part of the railroads. The gross discrimination of the "Green Line" roads, which penetrate all of the southwestern territory tributary to St. Louis, has also received attention, and the millers of the winter wheat states, together with the flour trade and commercial organizations of the south, are being enlisted in the combination of interests involved, in order to secure equitable and equal rates on flour in barrels and sacks and on wheat. The railroads have much to gain by equalizing rates and the influences now being brought to bear will, we are sure, be equal to the task of compelling the railroads to adopt a new and just policy.

* * *

REGARDING the Buffalo convention, we can safely say that it promises to have the largest attendance in the history of the National association, and the results achieved will certainly far excel in importance those of any previous convention, if present indications mean anything. The preparations for the meeting are already under way. Buffalo will extend a royal welcome to the millers and will furnish such facilities for transacting business as will enable them to dispatch it with promptness, as well as with due regard to details and thoroughness.

* * *

THE National Association of British and Irish millers held a general meeting at London Feb. 1st, which was attended by about thirty representative millers. The chief topic of discussion was the depression in the trade, and after a warm debate the following resolution was adopted:

Resolved, That the association co-operate with other branches of commerce, particularly the agricultural interest, in efforts to obtain redress of grievances from the legislature.

Two other resolutions, one of which recommended a duty on imported flour, and the other a general levy on imported goods, were voted down. Some of the largest millers in the kingdom, notably Messrs. H. Robinson, A. Baker, and others, denounced the idea that foreign flour was the direct cause of the depression as fallacious, and strongly opposed an import duty. We can only repeat what we have previously said on this matter, that so long as the weight of sentiment among British millers is adverse to a duty on imported flour, there is little danger of such a duty being levied by parliament.

* * *

THE millbuilders and machinery manufacturers seem to be having an unusually large business for this season. All have expressed surprise over the gratifying nature of the trade during the past two months, and a most hopeful feeling prevails. We are glad to see this, but would like to be able to say as much for the millers, who are undergoing a severe strain just now, owing to the high prices of wheat and the dullness and low prices of flour.

LOCAL AND PERSONAL

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MINNEAPOLIS, Feb. 22.

Several of the steam mills allowed their output to fall off last week, and though some of those using water made a gain, the total product was a little lighter than the week before. The output was 114,100 bbls—averaging 19 017 bbls daily—against 118,100 bbls the preceding week, and 114,400 bbls for the corresponding time in 1887. The water is not quite as low as it has been in the past, but loosened ice in the canals has given more or less trouble since Monday. There are seventeen mills running again this week, though the output of a few is not large. The eight using steam, are, of course, being operated well toward full capacity, and getting out the bulk of the flour. Another 1.000 bbl mill has just completed a steam plant, and will probably be grinding with its engine before Saturday. The daily product will be 19,000 to 20,000 bbls. The flour market is in a rather unsettled state. An advance in freight rates took effect yesterday, and millers being somewhat incredulous about the new schedule being maintained, are uncertain how to proceed. During the time that the low export rates were in force, they were enabled to sell quite freely, as indicated by last week's figures, but the higher rates will cut this trade off largely, it is thought. A few of the larger firms report that they are doing a fair amount of business, but the others characterize the market as very dull. The direct exports of flour last week were 55,000 bbls, against 35,500 bbls the previous week.

The MILLER has made an effort to secure data relating to the operation of the larger merchant mills of the northwest during January, and is able to give the result of information supplied by 39 mills located in Minnesota, Wisconsin and Dakota. Below are the figures, Minneapolis not being included:

	Minn.	Dak.	Wis.	Totals.
No. of mills	26	8	5	39
Daily capacity, bbls	12,690	7,580	950	22,220
Making daily Feb. 1, bbls	6,780	5,960	845	13,585
Product for Jan., 1888, bbls	200,788	135,661	14,245	350,694
Exported during Jan. 1888, bbls	54,235	35,344	1,864	91,443
Product for Jan., 1887, bbls	207,771	115,445	15,360	338,576
Exported during Jan. 1887, bbls	40,612	29,696	500	70,808

During January last, Minneapolis mills made 492,670 bbls of flour, against 441,750 bbls same time in 1887, and exported 161,550 bbls, against 160,670 a year ago. Last month 32 5 per cent of the product was exported, against 37.9 per cent exported in 1887.

* *

Matt. Walsh has returned from the Hot Springs.

W. D. Gray of Milwaukee was in the city Thursday.

H. Beumer, of St. Augusta, Minn., is in town, buying machinery and supplies for his mill.

Three Reliance purifiers, the new machine got out by Allis & Co., are being placed in the Washburn B.

Daniel E. Smith, representing Annan, Burg & Co., of St. Louis, has been in Minneapolis this week looking up business.

T. W. Nash, of Farmington, Ia., has become second miller in the Otter Tail mill at Fergus Falls, Minn., succeeding L. Pellemans.

S. B. Washburn and John Trimble, two millers who have been seriously ill for several weeks past, are able to be about again.

Richard Dawson, of Dawson Bros., Pontiac, Mich., was in the city Monday, being on his way from Dakota to Chicago. He is interested in a mill at Pembina, Da.

The new Galaxy engine was turned yesterday for the first time, and the mill will probably be grinding with steam to-morrow.

Kenneth Irving, until recently Boston agent of J. B. A. Kern & Son, of Milwaukee, is spending a few days here extending his acquaintance among local millers.

W. A. Clarke, local agent for the Stilwell & Bierce Mfg. Co., has about completed a 100 bbl mill at Frankfort, Da., for himself. He receives considerable of a bonus from the town.

For the four months ending Feb. 1, the Columbia averaged a flour output of 26,000 bbls per month. The present month its output has been cut down somewhat by low water, but it is making a good showing even now.

J. W. Morse, appointed from this city as state boiler inspector, will have supervision over the central district, and occupy an office at the state capitol. He will, however, remain a resident of Minneapolis, and open an office here.

A new 56 inch Victor water wheel is being put in for the "little side" of the Washburn A, the old one, which had been in use about seven years, being broken. The smooth rolls on the same side of the mill, some thirty double sets, are being reground.

The hexagon reels in the Pillsbury A are being gradually reconstructed into round reels, two or three millwrights being kept constantly employed at the work. The scalpers were changed over some time ago. The reels being put in are of a home-made pattern.

E. J. Bliss, of Durant, Elmore & Co., Albany, N. Y., has been spending a few days in the city, and Saturday evening C. A. Pillsbury gave a banquet at the West hotel to a limited number of friends in honor of his presence here. Mr. Bliss formerly represented the Pillsbury mills in New England.

F. E. Holmes, manager of the milling department of the Washburn Mill Co., is in the east now and will not be home for a week or more. Robert McKinnon, formerly of the Sidle Fletcher Holmes Co., is now connected with the Washburn company, and during Mr. Holmes absence, has charge of the business.

J. L. Willford returned Friday from a trip of several weeks in the south. While away he started up a corn meal mill at Huntsville, Ala., which his company furnished with machinery, and the proprietors, Williams & Andrews, say that they are turning out the finest quality of meal ever placed on the market.

There were seventeen mills running this forenoon, as follows: Columbia, Crown Roller (part steam), St. Anthony, Holly, Northwestern, Palisade (steam), Cataract, Pettit (steam), Phœnix, Standard, Pillsbury A (two-thirds steam), Pillsbury B (part steam), Anchor, Washburn A (steam), Washburn C (steam), Dakota and Minneapolis.

Kennedy Bros., biscuit and cracker bakers, suffered $5,000 damage by a fire in the Schutz block on Washington avenue, yesterday evening. They had $4,000 insurance. The same firm was but recently burned out directly across the street. All the mills using water were at once shut down to give the city water works an increased head.

L. S. Hodgeboom, representing the Knickerbocker Co., came up from McGregor and Dubuque, Ia., Monday, where he took considerable orders for Cyclone dust collectors to go into elevators at those points. The Knickerbocker Co. has about concluded to establish a storehouse in Minneapolis, at which a supply of the machines for the northwest could be kept in stock all the time.

E. Knipps, who recently took charge of A. C. Morrill & Co.'s mill at Little Falls, Minn., is spending a few days in the city. The Morrill mill has 125 bbls capacity, and under the management of Geo. H. Townsend, is kept steadily in operation. Little Falls is conceded to have one of the best water powers in the northwest, and an effort is being made by citizens to secure the erection of another mill the present season of from 300 to 500 bbls capacity.

The Willford & Northway Mfg. Co. held its annual meeting Tuesday, at which J. Silas Leas and Chas. Barnard of Moline, Ill., were present. The business of the company for the year was quite satisfactory, being considerably improved over 1886-7. The old officers were re-elected, J. L. Willford being president; J. S. Leas, vice president; and W. P. Northway, secretary and treasurer. The same gentlemen act as directors, with the addition of H. A. Barnard and E. O'Connor.

Government contracts for about 5,680 bbls of flour were awarded last week by the commissary of subsistence at St. Paul. The Columbia Mill Co. of this city, furnishes 80,200 lbs patent at $1 20 per bbl, delivered here; Russell & Miller Milling Co., 670,300 lbs straight at $1 89 per 100 lbs; Russell & Miller Milling Co., 336,600 lbs straight at $1.93 per 100 lbs; Mandan Milling Co., 27,000 lbs patent at $2.15 per 100 lbs. The flour is to be delivered at Bismarck in the three latter instances.

John Maddocks, purchasing agent for Pillsbury & Co, and who has made something of a local reputation by outspoken opposition to orthodox religion, has invited the president of the City Prohibition club to discuss in the city press the subject of "prohibition," claiming it to be "unrepublican, unchristian and unscientific." It will be remembered that not long ago he hired a hall at his own expense and gave a lecture, in order to publicly combat some doctrine enunciated by a local divine.

Geo. Flanders, for five or six years past timekeeper at the Pillsbury A, will shortly give up that position to engage in another kind of occupation. About a year ago he and Second Miller Snyder bought 30 acres of land near the St. Louis hotel, on Lake Minnetonka, and he will this season begin to cultivate his half of the property, giving the work his personal attention. Recent railroad improvements in that locality have caused the land to heavily appreciate in value, and both gentlemen have profited by the investment. No one has been named to take Mr. Flanders' place at the mill.

The receipts of wheat and shipments of flour and millstuff from Minneapolis by the various roads for the week ending Saturday were as follows:

	Received. wheat. bus.	Flour, bbls.	Millstuff tons.
Milwaukee	158,440	19 867	576
Omaha	78,400	19,419	1,455
St. Louis	47,000	7,305	56
Wisconsin Central	------	10,960	98
Manitoba	218,080	------	78
St. P. & Duluth	------	5,625	15
Northern Pacific	41,440	------	219
Minn. & N.W.	560	9,586	325
C. B. & N	------	32,640	602
Minneapolis & Pa.	12,300	------	------
Soo	------	11,068	136
Totals	446,240	116,450	3,562

The disorder known as "winter cholera" is becoming a pretty serious matter on the platform, there being hardly a mill whose operative force is not reduced more or less by its ravages. Recent cases seem to be of a more serious nature than formerly. John Bowland, head packer of the Zenith, has been sick with the complaint about a week, and there are doubts about his recovery. E. R. Barber, of Barber & Son, is also quite seriously ill with it. Prominent among other parties more or less affected by it are: J. S. Dodge, of the Washburn C; Thos. Clark, of the Palisade; J. F. Stephens, of the Pettit, and J. M. Smith, of the Cataract office.

DULUTH DOINGS.

Wheat took a tumble early last week getting down to 78¾c for May, the lowest point touched since December. On Saturday there was a decided firming up, and the strength continued through to-day. May sold up to 79¾c during this morning, and closed strong this afternoon at 79¾c. Cash wheat closed at 76¼c, nominal for 1 hard. Receipts are still simply nominal. Cars on track during the week have run from 1 to 25. Much of the wheat coming in has been consigned to the Duluth Elevator Co., and as that corporation has not been ready to care for it, has remained in the yards. The result was that receipts reported for the week were less than 23,000 bus. Shipments were 6,000 bus.

The grain in store this morning was as follows:

	Bushels.
No. 1 hard	5,944,361
No. 1 northern	777,648
No. 2 northern	149,929
No. 3	43,001
Rejected, and no grade	28,644
Special	8,310
Total	6,952,093
Increase for the week	16.310
In store one year ago	10,369 630
Corn	2' 8,394
Oats	48,466

The board of trade on Friday accepted the final bonds of the Duluth Elevator Co., and made its elevators No. 1 and No. 2 regular. No. 1 has been nearly filled with wheat for some time, and No. 2 was to begin taking in wheat this afternoon. A report has gone abroad that the wheat in No. 1 had never been counted in the stocks in store here, but would now come in to swell the visible supply. As a consequence grain merchants here have been besieged with inquiries about the wheat. The facts are that all the wheat has been included in receipts as it came in, and has appeared in the weekly statements of Duluth stocks. There are about 125 cars in yards to go into the Duluth houses, so this week's receipts will show up better than for some time.

The board of trade will hold no session on the 22d.

Walter Turle, of Turle & Wright, has returned from a month's visit at New York city, and O. C. Hartman, of Hartman & Co., from a week's business trip to Chicago. ZENITH.

Duluth, Feb. 20.

Nebraska Millers in Council.

The Nebraska Millers' State Association met at Lincoln, Feb. 16. President White addressed the meeting, fully stating the object thereof.

The minutes of the second annual meeting were read and approved.

A motion by A. Jaeggi that the executive and transportation committees be combined and that the executive committee hereafter shall consist of three members, with the president and secretary of the association, was agreed to.

President White then appointed the executive committee as follows: A. Jaeggi, of Columbus, chairman; O. A. Cooper, of Humboldt, and F. S. Johnson, of Milford.

A motion instructing the secretary to visit the millers of the state who are not members, with a view to having them join the association, was agreed to.

On motion the circular letter of the National association was taken up, the several questions therein submitted and the replies thereto agreed upon.

Many subjects of importance to the association were discussed at length and referred to the executive committee, with power to act, after which a motion to adjourn was agreed to.

D. H. HARRIS, Secretary.

S. S. McCrea was Buffalo agent of the Grand Trunk railroad, and became innocently involved in the grain transactions of E. B. Wilbur, who recently departed from Buffalo owing heavily. The road has made good for McCrea $16,000 in unpaid freights, etc., and there is $11,000 to be paid.

F. W. Schraeder, of Roca, Neb., is rebuilding the mill which was burned in July last. The Case Mfg. Co., Columbus, O., has the contract.

ST. LOUIS SIFTINGS

ST. LOUIS OFFICE 119 LOCUST ST. E. E. CARRERAS, AGENT

Our flour market, while not quotably lower, ruled weak and dull during the entire week. Values favored buyers right along and slight concessions were made in nearly every sale. Offerings remain light and this fact was the only feature which tended to strengthen prices or hold them up. The demands of buyers were not very large, so that the exchange movement was somewhat small and light. The demand was confined to the wants of the southern trade, although toward the latter part of the week several heavy export orders were reported to have been booked. The receipts and shipments were lighter.

By the starting up on Monday of the Planet, President and Laclede, an agreeable increase in the output of our mills is noted, as all those in operation last week continued under way. Work seems to be plentiful, for there are no withdrawals talked of, but on the contrary Plant's Roller A will start up both halves Monday morning and one or two other mills now running light are considering the matter of increasing their output. Millers generally are satisfied with the movement, but complain loudly of prices, which are very low, but could be better were the railroad companies to act squarely and not discriminate outrageously in favor of Texas mills. For the week the output amounted to 68,700 bbls, a daily average of 11,450 bbls, as follows:

Mill.		Average daily output.
Roller A	Geo. P. Plant Milling Co.	1,000
*Planet	J. B. M. Kehlor	800
Anchor	Kauffman Milling Co.	1,400
Victoria	Victoria Mill Co.	800
Park	E. O. Stanard Milling Co.	800
*President	Kauffman Milling Co.	1,000
Regina	Regina Flour Mill Co.	600
*Alton City	E. O. Stanard Milling Co.	700
Jefferson	Sessinghaus Milling Co.	400
Saxony	E. W. Leonhardt & Co.	400
Laclede	Kehlor Bros.	400
*Edwardsville	Kehlor Bros.	
*Kehlor	D. M. Kehlor Milling Co.	800
Crown Roller	Crown Milling Co.	350
Camp Spring	Camp Spring Milling Co.	700
St. George	Henry Kalbfleisch & Co.	
Meramec	H. B. Eggers & Co.	100
Hezel	Hezel Milling Co.	600
United States	E. Goddard & Sons F. M. Co	400
*Valley	Teidemann & Co.	
Carondelet	Carondelet Milling Co.	200
Total daily output		11,450
Output preceding week		10,400

*Owned by St. Louis parties, but located outside the city.

* *

The St. Louis Millers' Association seems determined in its fight against unjust discrimination by southwestern roads in favor of Texas mills, and intends to use all possible means to remove this glaring injustice. Several meetings were held during the week and although some good has resulted from the petitions and requests, still the evil exists to some extent and the war will be continued until fair play is allowed. A petition was presented to the exchange Monday, asking for action, together with the demand forwarded to the Texas traffic association, as follows:

ST. LOUIS, Feb. 11.—Messrs. W. H. Newman, General Traffic Manager; H. F. Merrill, General Manager; D. Miller, General Freight Agent: GENTLEMEN—The St. Louis Millers' Association, on behalf of its members and in the interest of the mills of Illinois, Missouri and Kansas, ask you and the lines you represent and connect with to consider a revision of your classification or rates by which flour to Texas and Arkansas is made to pay higher rates than wheat.

The discrimination against our product while we draw our raw material largely, if not mainly, from your local lines, cuts against us both ways; first, by diverting from our market wheat which would otherwise come here, and next by barring us from an equal chance to compete for the Texas flour trade; also enabling Texas mills to purchase direct in this market, a double influence to enhance cost, cutting off supply and reducing our stock, the difference in rates paralyzing our efforts to place our products in Texas markets, whereas these should be open to us on equal terms.

The Texas mills have advantages from local crops which defy successful competition and only after local crop (controlled by them at prices that it would not to ship out) is exhausted do they come in to our territory under the protective discrimination you give them to take our wheat at the tail end of the season and hold us out of the flour market, which would otherwise be open to both alike. We have as much right to demand a reversal of these conditions and that your rates on flour should be 10c per 100 lbs cheaper than wheat to enable us to place our flour in competition during the portion of the season when their local crop advantage bars us out. We make no such absurd demand, but if the railroads have the right to equalize distribution and manufacture by discriminative rates (which we deny), you could do so, and, besides, have as further reason for so doing that you would increase your traffic, first, by short to long haul on wheat from the interior to St. Louis, and next by the long haul on flour from here to Texas markets.

We ask no advantages over our Texas competitors, but simply for fair play and no favors; they have the inside track for the greater portion of the year through local crops, and that has been sufficient inducement to them to build and operate mills. Our interest in equal rates is too obvious to require argument, but, as a business proposition, how will it affect your interests? We maintain that on the basis we propose of equal rates on wheat and flour, your revenue will be increased year by year, and that such policy will also affect the interests you represent favorably, if not directly, by cheapening breadstuffs to your southern patrons, the sum of such economy promoting the prosperity and development of the territory drawing supplies and marketing products over your lines.

We ask early and earnest consideration of our demand for equal rates on wheat and flour. This has long since been conceded on east-bound business, and if there are any good reasons why you cannot do the same, with your much higher mileage rates, against which we now make no protest, we will be pleased to have them stated.

LOUIS FUSZ, President.
ALEX. H. SMITH, Secretary.

* *

The Laclede started up Tuesday.

Head Miller John Milne of the Plant will start up the entire mill on resuming Monday.

The Saxony did not get under way until Tuesday, owing to its having its boilers overhauled and repaired.

River navigation was again resumed on Friday and several large shipments of flour were made per barge lines.

The Planet at Litchfield started up half of its equipment Monday, and averaged 800 bbls a day during the week.

Miller John Riderer, of Higginsville, was on the floor Thursday, finding an outlet for disposing of his surplus stock.

Henry Buehler, Jr., has withdrawn from the firm of F. Tiedemann & Co., proprietors of the O'Fallon and Collinsville mills.

The Victoria was considerably hampered in its work during the week by having its switching arrangements neglected by the railroad company.

Head Miller J. H. Aldous of Sparks' mill at Alton, has ordered a line of Cyclone dust collectors from the Knickerbocker Co. to be placed in position at once.

Head Miller Peter Lindecker, of the Regina, has met with a great misfortune of late in the death of a favorite child, and is himself confined to his home by illness.

Frank B. Hogeboom, southwestern agent for the Knickerbocker Co., continued to illustrate his energetic disposition by placing Cyclone dust collectors in several of our mills during the past week.

Secretary Will Smith, of the Plant Milling Co., and Vice President Frank Kauffman, of the Kauffman Milling Co., are doing the southern states and taking in the Mardi Gras festivities at the same time.

Ex-Gov. E. O. Stanard, proprietor of the Eagle Steam, Park and Alton City mills, has gone to New Orleans, where he will preside over the convention of the National Industrial League, of which he is chairman.

"Judge" Loomis, the well known mill machinery agent, is still confined to St. Luke's hospital, and during the week had to undergo a surgical operation. He is reported as doing nicely, but is improving slowly.

Head Miller Foley, of Kehlor's East side mill, was the recipient on last Saturday of a liquid token of appreciation from an old time friend, which he shared with the "boys" after the mill had completed its week's work.

A petition for establishing standards of flour in accordance with the present system of milling has been presented to the exchange and was made the special order for the meeting on Saturday afternoon, when the millers and flour dealers will be given a hearing.

The Bemis Bro. Bag Co.'s new factory at Omaha has been started up and is gradually commencing to turn out work. An experienced corps of employes from their factory in this city will shortly be sent up to the new one, and work will be commenced in earnest. Being situated in a city tributary to a large wheat and flour producing section, it is expected that a good trade will be had from the start, as the good reputation of the Bemis bags has been known in that part of the country for years.

The National Operative Millers' Association held a special meeting last Sunday for the purpose of nominating officers for the ensuing year. The following names were placed upon the tickets: President, Charles Brown, head miller of the Park mill; first vice president, Henry Stark; second vice president, John Robinson and Wm. Ferguson; treasurer, D. J. Foley; trustees, Chas. Brown, D. J. Foley, J. D. Pollack, E. J. Raute and John T. Gebbie; secretary, W. T. Bobbitt. Three trustees are to be elected and the election occurs Sunday, March 4.

E. E. CARRERAS.

St. Louis, Feb. 18.

TRADE TALK

(39.) New York miller: "After reading the article in your issue of Feb 10, from the pen of some one whom you style an "enterprising young miller," the thought struck the writer what the effect would be if every one in the business pursued the same plan, namely, running up to full capacity the year around, whether demand for flour would admit of profit or loss. It seems to me it would be loss all the time and no profit, for after glutting the markets with full time running, to keep on doing so would never give them a chance to rise again. It takes lots of nerve to run a mill full capacity in face of loss on every barrel made, and I think if this 'enterprising young miller' has the nerve to do it, he will find at the end of the year that his former policy of shutting down when no margin was left was the best. In this section most, if not all the millers who have attempted to run full capacity, regardless of markets, the past five years, have retired from the business and are not living on the interest of what they have made. The writer has started out several times in the fall of the year with the same idea, to keep the mill going night and day on that crop anyway, and see how it worked, but so far has not had the nerve to carry out the idea, and not from lack of funds, either. I trust that not many will attempt the 'run any way' plan this year. So far few have, for although it does cost money to stop, or to run short time, it is simply ruinous to jam her through in the manner spoken of And if anyone finds nerve enough to do it, I think that he will also find that although he has more nerve, he will have less money than others less enterprising."

* *

(40.) Geo. H. Doane, Holly, Mich.: "Question: How shall we figure the true cost per barrel for manufacturing flour? Answer: Divide the total amount of money paid out for one year for all purposes (less the actual amount paid for wheat at the mill), by the total number of barrels of flour made during the year, and the result is the true cost per barrel."

* *

(41.) To whom it may concern: The writer would respectfully call attention to the possibilities of inaugurating commercial relations in Scandinavia and northern Germany. Myself a Scandinavian, after twenty years residence in the United States I recently made a visit home. In conversation with the consuls, merchants, and others in the leading trade centers of those countries, I became convinced that particularly dealers in northwestern flour and flour mill machinery, and the smaller improved agricultural implements, were neglecting their opportunities in that direction. The customs laws as a whole are very liberal, there is a direct fortnightly steamship service from New York, the managers of the line being very desirous of doing everything in their power to foster all efforts of that kind. A specially favorable opportunity for reaching both consumer and middleman, and for the establishment of sub-agencies, will be the opening of the great Scandinavian exposition in Copenhagen in May next. The exposition is under the patronage of the Danish government and is heavily subsidized. The buildings are about completed. The neighboring countries of Norway, Sweden, Finland, Schleswig-Holstein, Iceland, Shetland and portions of the Baltic provinces have been officially invited. Representatives of a population of at least ten millions can reach Copenhagen at an average expenditure of eight to ten dollars. The city itself is commercially the most favorably located in northern Europe. It possesses a population of about 300,000 and is the acknowledged centre of art and culture in northern Europe. The commerce of all of Denmark, half of Russia, the entire trade by sea of northern Germany, all of the foreign trade of Sweden and a great part of Norway, has to pass the gates of Copenhagen. Its very name implies the "Harbor of the Merchants," and was acquired in the earliest historic dawn of northern Europe. Science, industry, art, agriculture and commerce will vie with each other to make the coming exposition in the capital of the north the most noteworthy on record. All the preparations are on a scale of magnitude never before attempted. Space, either in the building or its immediate vicinity, could undoubtedly yet be secured. The location is in the very heart of the city. A most ably conducted daily and weekly press, as well as excellent illustrated journals, exist and enjoy a large circulation. The agricultural and special trade journals also flourish. Yet in the commerce of this great public, the sons and daughters of which are located in the northwestern states to the extent of over a million, our chief products are practically unknown, except an occasional cargo of No. 1 hard wheat, but our superior flour is scarcely known at all to the masses. It is the firm belief of the writer that much could be done in that direction, if an intelligent and persistent effort was begun and sustained. Correspondence from all parties interested is respectfully solicited. Address NORTH EUROPEAN COMMERCE, care NORTHWESTERN MILLER.

R. W. Welsh, of Baltimore, Md., last week received two patents on a wheat scouring machine, and assigns them to the Welsh Wheat Cleaning & Mfg. Co., of the same place. The invention consists, essentially, in the combination of two vertical cylinders separated by an intermediate space, through which the wheat is permitted to descend slowly and driven in the same direction, but at different rates of speed.

A correspondent at La Crosse, Wis., writes: Both mills here—the Freeman and Listman—are running to their full capacity. The former has had occasional shut downs on account of wheat not coming in fast enough, but the Listman has had no trouble in that way. During the month two Gray scalpers and two Gilbert reels have been added to the outfit of the latter mill.

The Northern Pacific railroad has given notice that it will carry wheat and other grain for seed over its line at one-half rate. This, however, will only apply to seed grain to be used on that line of road.

Important Notice.

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Please favor us with a share of your patronage.

READ.

Pillsbury A Mill. Minneapolis, Feb. 13, 1888.
To Cockle Separator M'f'g. Co., Milwaukee, Wis.

Gents: In regard to your latest improved rolling screen Cockle Machines, we would say we like them very much. The eight we have put in are doing *first-class work*, and we consider them the *best cleaning machines we have.*

C. G. HOYT, Head Miller.
HIRAM SNYDER, Second Miller.

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Bradford Mill Co. ..... Cincinnati, O.
Great Western M'f'g. Co. ..... Leavenworth, Kan.
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F. H. Peavey & Co.
MINNEAPOLIS, MINN.

SEVENTY COUNTRY HOUSES IN MINNESOTA, IOWA, DAKOTA AND NEBRASKA.

Correspondence Solicited.

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Commission Merchants
FLOUR, GRAIN AND FEED.
37 Water Street, NEW YORK.

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Special attention given to orders from consumers for milling wheat.
ROOMS 59 AND 60 CHAMBER COMMERCE,
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ORDER WHEAT
—OF—
G. W. Van Dusen & Co.
MINNEAPOLIS, MINN.
Operate 90 country elevators, and carry large stocks of wheat at Minneapolis. Can ship promptly.

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6 & 8 Sherman St., Chicago, Ill.
Commission merchants. Flour, grain and millstuff. Liberal advances on consignments.

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FLOUR
COMMISSION MERCHANTS,
1831-33 Market St., PHILADELPHIA.
Invite correspondence with millers.
Cash advances made on consignments.

DITMAR & WEISSER,
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Correspondence solicited from American flour mills. We are prepared to offer the most advantageous terms to millers who desire export trade. We give first-class bank acceptances against shipping documents. References unexcelled.

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Flour, Feed and Grain
COMMISSION.
Room 46 Republican Building, ST. LOU'S.

TO MILLERS.

Having been for four years employed by the Minneapolis Millers' Association as their chief inspector of wheat, and the last three years in the grain commission business in this city, constantly selling and buying wheat for resident and outside millers by sample, I shall be pleased to give orders for milling wheat my personal attention. I refer to any milling firm in Minneapolis. M. W. YERXA, Grain Commission, 40 Chamber of Commerce, Minneapolis, Minn.

A. W. HOWARD,
Flour Broker
Windom Block,
MINNEAPOLIS.

Special facilities for selecting flours. Make daily baking tests for the majority of Minneapolis mills. Highest references.

Correspondence solicited from millers desiring flour tests.

E. HOLMES & CO.
Grain Commission Merchants
Room 32, Corn Exchange,
MINNEAPOLIS, MINN.
Special attention given orders for milling wheat.

W. W. LEFEW,
Flour Broker & Commission Merchant,
RICHMOND, VA.
Consignments solicited. Storage free, brokerage 10c bbl, cartage 5c bbl when hauled to storeroom. Also solicit correspondence regarding sales made by sample to be shipped B L attached.
Refer to State Bank of Virginia.

W. R. KENAN,
FLOUR BROKER,
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Flour, Corn and Cereal Products.
Correspondence solicited.

F. W. JENKINS,
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Correspondence solicited from shippers. Reference, Fifth National Bank.

John Lynch. Hugh Lynch.

JOHN LYNCH & BRO.,
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No. 142 North Delaware Avenue,
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ISAAC H. REED & CO.
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FOR THE SALE OF
FLOUR AND GRAIN.
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Consignments solicited.

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D. C. MOAK & CO.
[Successors to A. B. Taylor & Co.]
Wholesale Grain Dealers
Rooms 31 and 32, Chamber of Commerce,
MINNEAPOLIS, MINN.
Milling orders for round or car lots of Hard or Soft Spring Wheat promptly filled.
Careful attention given to consignments.

COOPERS' CHIPS

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The Hardwood-Storage shop is shut down this week.

Jas. Shean, of the Hennepin shop, has a daughter at his house; weight, 8 lbs.

C. C. Beal, conducting a general store and cooper shop at Clinton, Me., is dead.

The store of Hynson & Co., dealers in coopers' tools at St. Louis, was broken into on the night of Feb. 16, and $300 worth of knives stolen.

C. McC. Reeve, manager of the Hardwood-Storage Co., and wife, departed Friday for the City of Mexico, and will be absent about six weeks.

Irwin's cooper shop and the machine shops and foundry of McKeough & Trotter, at Chatham, Ont., were burned Feb. 15. Loss, $27,000; insurance, $4,000.

H. Henry, of the Sixth Street shop, is said to have taken his best girl to the theatre a few evenings since, and having only a nickel left after paying the admission fee, allowed his lady to ride home on a street car, while he walked.

On Feb. 14, a riot occurred at a stave mill five miles south of Helenwood, Tenn., resulting in the killing of Reuben Reed and the serious injury of several others. A boy named Smither, who escaped, is charged with killing Reed. The fight was stopped by the sheriff.

Andrew Foss, member of the North Star Bbl. Co., has been sick in the hospital for several weeks. At first he was supposed to have typhoid fever, but symptoms lately developed in the case have puzzled the doctors attending him. Among other features of the case has been the loss by the patient of his voice.

There has been little change the past week in the condition of the Chicago cooperage market, quotations remaining the same, says the *Northwestern Lumberman*. There has been a slight improvement in the receipts of hogs during the last few days, which has partially revived interest in barrels and tierces without bettering prices. Sales, however, are comparatively few, as packers are not doing much. The firmer feeling may culminate shortly in slightly advanced prices. What pork barrel and tierce staves are received are taken up readily, but the stock now coming in is hardly dry enough for the trade. There is no longer a complaint of excessive receipts of hoops, and a small demand is manifest, though at no better prices than have been obtained during the past two weeks, and business in them is slack.

The mills exported heavily last week, using more sacks, and the sales of barrels fell off somewhat. The local shops continue to be operated in a light manner, the largest cooperage in the city being idle the current week.

The sales and manufacture for four weeks and corresponding time last year, are shown below:

Week ending	Sales, bbls. 1888.	1887.	Make, bbls. 1888.	1887.
Feb. 18	39,950	37,000	50,050	35,000
Feb. 11	45,800	44,150	48,050	45,550
Feb. 4	38,600	44,550	40,300	40,550
Jan. 28	44,250	58,700	35,400	56,400

The reduced freight rates still prevail, though few of our coopers seem to be getting any benefit from them. Present freights will hold good for ten days yet, as the inter-state law requires that that much notice must be given before any advance is made. Elm staves on that account are being offered at 10½c per set, but purchases are mainly confined to two or three shops. Although there are a few points from which oak staves and heading can be shipped at the cut in freight, the prices of both are maintained at 12c and 4½c per set respectively. Dry heading is still limited in supply and meets ready sale. Shaved hoops continue to arrive at a lively rate and are piling up in considerable quantities. The number in the city at present will probably exceed 4,000,000. Those of good quality usually bring from $7.25 to $7.50 per thousand, some of the shops having large contracts at the latter figure. The stock of hoop-poles is light, as are also the receipts. Prices of poles are not changed, but they are held firm. There were 41 cars of stock received last week, of the following kinds: Oak staves, 7½ cars; elm staves, 12; heading, 6½; shaved hoops, 10; hoop-poles, 2; double stock, 3 cars.

Following are quotations of stock, delivered in Minneapolis: (In calculating the number of sets of staves to the thousand, we reckon on 62.)

No. 1 oak st'v's, with h'd g, per set	@		.16½
No. 1 elm staves, per set	.10½	@	.11
Oak staves, without h'd'g, per M	7.45	@	7.75
Elm staves, without h'd'g, per M	6.70	@	6.85
Heading, per set			.04½
Hoop poles, per M	10.00	@	14.00
Shaved hoops, per M	7.25	@	7.50
*Head linings, per M	.36	@	.40
Ten-hoop, all oak bbls			.38½
Ten-hoop, oak and elm bbls			.36
Ten-hoop, all elm bbls			.36
One stave barrel			.36
Price of mak'g h'nd bbls on poles	.10	@	.15
Price of h'ping off machine bbls	.07	@	.10

*F. o. b. at factory.

ST. LOUIS COOPERAGE.

[Furnished by Benj. F. Horn, stock dealer.]

The flour mills here are running pretty strong and exporting lightly, so that the call for barrels has become unusually heavy. The rate at which barrels are being used is probably 43,000 per week. This naturally gives the shops more to do and there is greater activity among them. Dry staves and heading are scarce, and prices seem destined to advance. There is a ready demand for all the elm staves and heading coming in at full values. Shaved hoops and poles are in fair request, and the market for them promises to grow better. Receipts of stock are light, the shipments exceeding them a good deal. Business in produce and meal packages, and stock for the same is slow and dull. Following are quotations here:

No. 1 elm flour barrel staves, per M	$ 6.25
No. 1 heading, per set	.04¼@.04¾
No. 1 hickory cooper shaved flour barrel hoops, per M	6.00@6.25
Hoosier hickory hoops, per M	4.50
Ten hoop (hickory) flour barrels	.30
Making flour barrels by hand	.08
Hooping off the same	.05
Head linings, per M	.35
Meal barrel staves, per M	5.25
Meal barrel heading, per set	.04¾
Meal barrels	.26
Produce and lime staves, per M	4.50
Produce heading, any size	.03½
Lime barrels	.22
Produce barrels	.22

St. Louis, Feb. 16.

Joel E. Carter, until recently a member of the firm of Carter & Co., oat meal millers at Peoria, Ill., has caused a sensation in that place by eloping with a young lady of nineteen, who was employed at his mill. Carter is a married man, about 47 years of age, and has a wife and two children, one a son 18 years of age, and the other a daughter of 14. Miss Kate Hefel is the girl with whom he is charged with eloping, an intimacy being claimed to have existed between the two parties for a year or more. Carter had about $25,000 in the bank, which he drew out on the day of his departure. It is said that Mr. Carter had been guilty of several other indiscretions during his lifetime. Before coming to this country he had a family which he deserted, claiming he had never been legally married, and has a son by that union twenty-three years of age in Akron, O., where he lived before going to Peoria.

The second chamber of the Swedish parliament has passed a bill imposing an imperial duty of 67½c per 100 kilos on rye, wheat, barley, corn, peas and beans.

Special Notices.

FOR EXCHANGE.

A nicely located 600 acre stock farm with good buildings, as part pay for a good mill. Address M. Martens, Merrillan, Wis.

FOR SALE.

Two Leffel water wheels. One 35 and one 40 inch. As good as new, and will sell cheap. Also three sets buhrs. Address D. J. Cameron, La Crescent, Minn.

FOR SALE.

A four story stone merchant and grist mill, 38x50 feet, situated on the great spring stream; lasting water power good. For particulars address Charles Phillips, Ex., New Hope, Bucks county, Pa.

FOR SALE OR RENT.

The Savannah roller mills are for sale or rent. The mill is in running order, has a good trade and a good reputation. Correspondence solicited. Address Kirtley & Williams, Savannah, Andrew county, Mo.

WANTED.

To correspond with anyone wanting a practical miller of ten years' experience in milling with both rolls and stones. Am 35 years old and am a good millwright. Address R. E., P. O. Box 347, Marysville, Kansas.

WANTED.

An experienced miller, with some capital, wants to rent a good roller mill with capacity of 50 to 125 bbls, and might purchase an interest if satisfactory to all parties. Address Renter, Northwestern Miller, Minneapolis.

SITUATION WANTED.

By a first class miller, to take charge of a complete roller mill. Can furnish good references, and guarantee best of satisfaction; can come on three weeks' notice. Address C. C., Northwestern Miller, Minneapolis, Minn.

FOR SALE.

Two sets Downton rolls, 12x30; one set Downton rolls, 12x24; one set Allis porcelain rolls, 9x18; one set Allis smooth rolls, 9x18; two sets Allis break rolls, 9x18. All the above in good running order. Address B. M., Northwestern Miller.

MILL FOR SALE OR EXCHANGE.

A 65 bbl steam mill, 3 story frame on stone basement in the best location in South Dakota to build up a paying business, owners not millers; will sell or exchange for other property. Investigate this. McDonald & Proudfoot, Agts., Pierre, Dakota.

FOR SALE—A GREAT BARGAIN.

"Gregson's Austin Roller Mill." The best water power, west of Lanesboro and south of Minneapolis, in the state. Present capacity 50 to 75 bbls per day; has turned out 125 bbls per day, and has power for 300 bbls of flour. For particulars address E. B. Crane, Austin, Minn.

MILL TO RENT.

To rent to an acceptable party, on very favorable terms, 350 barrel flour mill. Water power in abundance. Located in good grain country. Recently fitted throughout with Noye's patent roller process. Large cooper shop. For further information, address Flour Mill, P. O. Box 1592, Philadelphia.

COOPERS WANT WORK.

Minnesota and Wisconsin millers and cooperage manufacturers in need of Journeymen Coopers can be supplied with good workmen, free of charge, by addressing the undersigned, stating terms and prices to be paid. Address

J. J. McDANIEL.
2846 Tenth Ave. So., Minneapolis.

FOR SALE.

Mill plant for manufacture of crushed feed. Centrally located in the city of St. Louis. The plant is in complete running order. Capacity large, built on an economical basis for manufacturing. Can be used for various milling purposes. Satisfactory reasons for wanting to sell given to parties desiring to purchase. Address Ev. E. Carreras, St. Louis, Mo.

TO MILL OWNERS.

The Northwestern Operative Millers' Association has on its list some of the best millers in Minneapolis who would like to secure positions in country mills, and mill owners desiring competent men, either to take charge of their mills or for other places, are solicited to correspond with F. A. George, secretary of Employment Bureau, Police Headquarters, Minneapolis.

WANTED.

Situation as head miller by thoroughly competent man of 15 years' experience in Germany and this country in stone, roller or combination milling; No. 1 buhr dresser; speak English and German, and am well posted in bookkeeping. I am 29 years old, married, sober, honest and industrious. I have at present charge of a 75 bbl Allis roller mill, but would like to get a permanent situation in a 100 to 200 bbl roller mill built on a different system. Nebraska, Missouri or Dakota preferred. Will guarantee good and satisfactory results as far as the mill or the wheat permit me. Will work for reasonable wages paid promptly each month; will come on trial if required, or will furnish references if desired. Parties answering please state capacity of mill and wages paid. Address John Schmerer, 526 South 11th St., Lincoln, Neb.

IT IS STRANGE THAT MILLERS

Will use flour brands cut with punches or dies when they can send to Lanphear, of Minneapolis, and get an original brand cut by hand that cannot be imitated with dies in any city in the United States. Sketches free. Send on the words you want in brand, and see what I can do. I now have orders from mills in 13 states. W. K. Lanphear, 201 Nicollet Ave., Minneapolis.

WANTED.

Good second hand machinery: One 50 hp engine; one 50 hp boiler, 60 inches diameter, 14 ft, with 3½ inch flues; one No. 2 horizontal Morgan scourer; one No. 2 Richmond brush; two No. 2 oat and weed separators; one No. 2 Western corn sheller and cleaner; one Dormant warehouse scale, 3,000 lbs; one flour packer, Barnard & Leas preferred. Parties having any of these machines for sale, address Lock Box 45, Warren, Illinois.

WANTED.

By the largest Feed Dealers in Western New York, bran and middlings, bulk and sacked, in lots from 1 to 20 cars daily. Millers wishing to find buyers should address

HEINOLD & RODEBAUGH,
83 Merchants' Exchange, Buffalo, N. Y.

P. S. We have a 70 hp Cummer Engine and 80 hp Boiler, both nearly new, for sale cheap.

Yours truly, HEINOLD & RODEBAUGH.

FOR SALE.

A full roller Allis mill, to be completed by 1st of April and guaranteed by E. P. Allis to give as good results as any mill in the state; capacity 125 bbls per day. Good wheat section; home trade for flour and feed; five railroads and river as shipping advantages; natural gas as fuel. Will sell all or one-half on easy terms; ill health and declining years reason for selling. For particulars address Thomas Ault, Bellaire, O., box 275.

FOR SALE—A BARGAIN.

All or half interest in a mill situated in the best wheat raising section; local trade takes entire product, flour and offal; mill's capacity, 50 bbls; combination of rolls and stones; local wheat more than enough to run the mill; built but four years; but one other mill in county. Prefer selling one-half interest to experienced miller, who is to take charge of mill, as I am in merchandise business and can not give mill proper attention. Mill in good running condition. Terms easy. Anna Stahl, Brussels, Ill.

FIRST CLASS OPPORTUNITY

For a young and competent miller, with a small amount of capital to gain possession of a first class mill well located in one of the best small towns in Minnesota. The miller may carry out his own plans regarding the running of the mill. Applicant to be successful must show himself perfectly reliable and well posted in the details of custom milling and must be willing to invest a small amount of capital. Sufficient backing will be given to such a person to enable him to carry out his plans and ultimately own a good mill in an excellent section of Minnesota. For further particulars apply to H. D. L., this office.

THE CHANCE OF A LIFETIME.

For sale cheap, a first class roller mill, located in a rapidly growing town with county seat, and in one of the most thickly settled and the greatest wheat growing counties of South Dakota. Local wheat more than enough to run the mill. Exchange business of 40,000 bus per year. The local trade takes the entire product, flour and offal. Cash business, requiring but little capital to run. The property will be sold cheap, as the proprietor has other and larger interests to look after, which demand his entire attention. The mill will pay for itself in three or four years. For description and further details, address Box 220, Ashton, Dakota.

FOR SALE.

Water power roller flour mill and saw mill, situated in Barry county, in Southwest Missouri, in one of the best wheat growing districts of the southwest (with mild climate), on a stream of never failing water; capacity, 40 bbls per day. The mill was built about one year ago. The machinery consists of 3 double sets of Todds & Stanley roller mills, one 36 inch stone for fine middlings, 2 Superlative purifiers, 4 reel bolting chest, 1 Gorton centrifugal reel, 1 small sizing reel, 2 scalpers, 1 Barnard & Leas wheat separator, 1 Eureka smutter and separating machine, 14 stands of elevators, 1 stone for corn meal and feed mill, 2 Leffel water wheels. Mill runs steadily on merchant and exchange work. Plenty of wheat at mill door. Also circular saw mill, good frame dwelling house with 6 rooms, large store house, blacksmith shop, barn and other buildings, with 16 acres of land. Price, $6,000. Good reasons for selling. This is a good chance for some one. For particulars address Hutchens Bros., McDowell, Barry county, Mo.

FOR SALE.

Second Hand Machinery.

One 10 reel bolting chest, reels 18 feet long, double conveyors, with all necessary driving gears and shafts; three Silver Creek centrifugals; one corn sheller; one Becker brush wheat cleaner. All above machinery in good condition. Price very low. COLTON BROS.,
Bellefontaine, Ohio.

FOR SALE

2 double sets 9x24 Roller Mills, complete.

1 single set 9x15 rolls; second hand.

Will sell the above for 20 per cent less money than you can purchase the same goods for elsewhere.

W. H. GETCHELL & CO.
317 11th Ave. South, Minneapolis, Minn.

FOR SALE.

The Farmers' Mills, Davenport, Ia. Owing to the death of the owner, this mill can be bought for less than half its cost. The mill is a modern roller flour mill, in perfect order, capacity 200 bbls. The cost of the mill can be cleared in one year. For information, address Chr. Toerring, Administrator, Davenport, Iowa.

FOREMAN WANTED.

Foreman capable of taking charge of mill furnishing establishment. Must be a competent draughtsman and have had experience in mill furnishing house; reference required. Address

MILL FUR. CO.,

Care Northwestern Miller, Minneapolis.

SAW AND STAVE MILL FOR SALE

AT A BARGAIN.

Located at De Soto, Crawford county, Wis., on Burlington & Northern railroad and on Mississippi river. The mill is 90x90 ft, two stories high and heavy frame; two 30 ft boilers, two flues, 44 inch shells, tested to 140 lbs cold water pressure; smoke stack 70 ft, 3 feet in diameter, built of heavy iron; engine 16x36 inches, Gale's make; drive wheel 14 ft in diameter, 22 inch face, all iron; force and cold water pumps; main shaft 90 ft in length; one double rotary saw mill; old style edger; lath mill, one knot saw; 250 ft old style endless chain for hoisting logs; one planer and matcher; two knives, 22 inches long, wooden frame. Stave machinery: one Sisleton stave cutter; one 40 inch Trevor, Lockport, N. Y., pendulous heading saw; stave bolts equalizing saw; one 36 inch heading bolting saw; John Greenwood & Co 's heading turner, latest style; one 8 ft heading jointer, including belting and tools Mill was run all last summer, to Dec. 1, 1887, on heading and staves. This is a rare chance for parties having timber land in the north. Mill could be moved with little expense. I will take staves and heading in payment for the mill. For terms address C. L. MUELLER, La Crosse, Wis.

Flour Mill at a Bargain.

For sale, on easy terms, a well located, finely equipped, modern roller mill, of 150 bbls capacity. Fine water power. Good demand for product. Excellent railroad facilities. Within fifty miles of Minneapolis. Any miller who understands his business can make a good thing out of this opening. Address F. A. S., care Northwestern Miller

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BAKERS'

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The steadiest running mill in the city.

A RARE OPPORTUNITY.

Parties wishing to engage in the milling business will find a grand opening at Hallock, Minn Ground on which to build, also bonus will be given to right party. None but responible party meaning business need apply. For particulars address ED. H. LOVE, Hallock, Minn.

Second-Hand Machinery

FOR SALE.

Two No. 5 Morgan scourers, in good condition; one three-roller mill; cloth dust collectors; also a number of rolls of good make, and various other second hand machinery. All in good condition and will be sold at a bargain. Address

C. A. PILLSBURY & CO.,

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WANTED.

A first class roller mill at Seymour, Baylor county, Tex., for the erection and successful operation of which a liberal bonus will be given. Correspondence solicited from capitalists and practical millmen. Address all communications to the secretary.

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Office at Nos. 84 and 85 Traders' Building, Nos. 6 to 12 Pacific Avenue,

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St. Louis Operative Millers' Asso'n

The object of this association is to unite all practical millers, to give aid to its members, to assist each other to procure employment, to establish a widows' and orphans' fund, and for the advancement of the art and science of milling The officers of the association are:

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Saves TIME, FUEL, LABOR, SPACE; burns Wood, Coke, Hard or Soft Coal; has DIRECT DRAFT and is always clean. ONE Heater does the work of any FIVE OTHERS. Barrels placed on MOVABLE Platform which is raised by pulley and weight into Heater consisting of HANGING FIRE BOWL surrounded by DOUBLE DRUMS of peculiar construction. Send for circular.

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Shops, 14th and Wash Streets.
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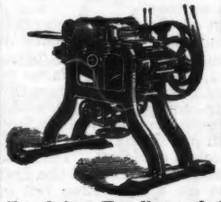
Correspondence solicited. Orders promptly filled.



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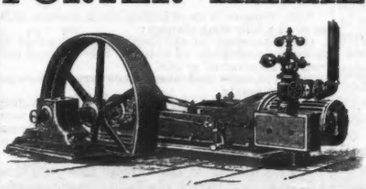

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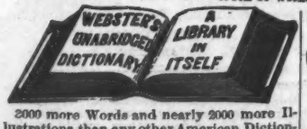

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LONDON LETTER

Flügel & Co., Agents for Great Britain, 26 and 28 Mark Lane, London, E. C., England.

There is no improvement to note in the wheat markets here—rather the reverse. Trade in fact could hardly be duller than it has been of late, and the persistent abstention of buyers has had the result of causing holders to give way somewhat in their pretensions. Not that I can discover any radical change in the general position. We have none too much wheat arriving. The quantity afloat keeps small. The American visible supply continues to decrease, and there is little or nothing shipping from India, where the prospects for the next crop are by no means brilliant. Indeed there has been rather an important reduction in the acreage sown, especially in the Punjab, which means that unless the yield per acre is much better than that of last year, which was certainly very short, there will be again but a small surplus for export this season—say 3,000,000 qrs. On the other hand, the pressure of foreign flour in this country is very great, especially in London, and this has a serious influence on wheat buyers. The principal cause of the dullness, however, is probably the continued liberal supplies of home grown wheat, which press forward in undiminished quantities, and which are underselling foreign descriptions. In a few days the government estimate of the crops will be published, and if this shows a crop of above 80,000,000 bus, which I believe it will, all the early estimates will prove to be too low. I, myself, estimated the crop last September to be at least 76,000,000 bus, and this now appears to be too low. Already since September our farmers have delivered nearly 7,000,000 bus more than in the corresponding period last year or equal to nearly 25 per cent increase. The crop of 1886, it will be remembered, was about 64,000,000 bus.

* *

I have seen it stated recently in some American journals that a new act has come into force in England, by which all flour imported from abroad must have the word "flour" and the name of the place where it is manufactured, distinctly marked on the bags or packages. This is not quite correct. The new act is called the "Merchandise Act of 1887," and came into force Jan. 1, 1888. It was passed with a view to prevent the forging, or misuse of trade marks. The act makes it a criminal offense to forge any trade mark (registered) or to use any mark so nearly resembling a trade mark as to be calculated to deceive, or to make, dispose of, or have in possession any die, etc., for forging a trade mark, or to apply any false trade descriptions to goods of any kind, unless it can be shown that there was no reason to suspect their genuineness, and all reasonable precautions were taken against committing an offense under this act. The punishment for the first offense is imprisonment for not more than four months, or a fine of £20. For the second offense, two years imprisonment or a fine. Any person in the United Kingdom procuring the commission of an offense under this act by a person outside the United Kingdom will be treated as a principal offender. It will be seen, therefore, that the act aims at preventing foreign goods from masquerading as British made. Foreign goods are prohibited to be imported under certain conditions, and these will be of most interest to American millers. The clauses in the act relating to foreign goods are as follows:

"All such goods, and also all goods of foreign manufacture, bearing any name or trade mark, being or purporting to be the trade mark of any manufacturer, dealer or trader in the United Kingdom, unless such name or trade mark is accompanied by a definite indication of the country in which the goods were made or produced, are hereby prohibited to be imported into the United Kingdom, and, subject to the provisions of this section, shall be included among goods prohibited to be imported as if they were specified in section 42 of the customs consolidation act of 1876.

"Before declaring any such goods, or taking any further proceedings with a view to the forfeiture thereof under the law relating to customs, the commissioners of customs may require the regulations under this section, whether as to information, security, conditions, or other matters, to be complied with, and may satisfy themselves in accordance with those regulations that the goods are such as are prohibited by this section to be imported."

"Where there is, on any goods, a name which is identical with, or a colorable imitation of the name of a place in the United Kingdom, that name, unless accompanied by the name of the country in which such place is situated, shall be treated, for the purposes of this section, as if it were the name of a place in the United Kingdom."

American millers, therefore, have naught to fear under this act, if they will see that the name of the place and the country where it is produced, are legibly marked on the sack or package, whatever the special trade mark may be. PANIS.

London, Feb. 6.

THAT BILL OF LADING.

The British Document with Final Corrections.

In our last issue we printed a communication from Secretary Seamans, to which was appended a copy of the pro-forma bill of lading lately formulated by the London Flour Trade Association and approved by the Glasgow and Liverpool associations. Regarding this Mr. Seamans writes:

"On receipt of the NORTHWESTERN MILLER I find that in the haste of making up copy for you of pro-forma bill of lading, that the last clause as published contains the requirement of the steamship companies under the new arrangement, and is not contained in the English pro-forma bill of lading, a copy of which is enclosed. This was overlooked from the fact that the first copy I made on a Red Line bill of lading did not contain this last clause, while the one sent you was made on a new Lake Michigan bill of lading just brought into use. I found it necessary to have copies made of the English bill sent me, which I have distributed broadcast to exporters. I am sorry this mistake occurred."

It will be seen from this that the final clause as published with the preceding ones last week, contains in effect that obnoxious condition of the transit companies to which such vigorous objection is being made. The clause in question runs:

"The property covered by this bill of lading is subject to all the conditions expressed in the customary forms of bills of lading in use by said steamship or steamship company at time of shipment."

Mr. Seamans further says: "The requirements to the agents here read as follows:

"All Glasgow bills of lading must contain either of the following clauses:

(1) Porterage of the delivery of cargo to be done by consignee of ship at the expense and risk of receiver of goods.

(2.) Tonnage and shed dues payable by consignee of goods.

(3) Property covered by this bill of lading subject to all the conditions expressed in local bills of lading used by the steamship or steamship companies carrying this property at time of shipment.

"The agent of the Great Eastern line adopts the third clause, consequently either clause is intended to cover the new arrangement."

The pro-forma bill of lading is here correctly reprinted:

Through Bill Lading No..... Contract No.....

TRANSIT COMPANY

AND THE

From.....to.....

Shipped, in apparent good order, by..... the following property, marked or numbered as below (weight, measure, gauge, quality, condition, quantity, brand, contents and value unknown), weight subject to correction.

To be delivered in like good order and condition, at the port of.....(or so near thereto as ship may safely get, with liberty to call at any usual port of call) unto.....or his or their assigns, upon payment in cash of freight due thereon, immediately on discharge of the property, at the rate of ....cents, American gold, per 100 lbs gross weight, and advanced charges .....without any allowance for credit or discount, one pound sterling being considered equal to four dollars and eighty cents ($4.80) American gold, (general average payable according to York-Antwerp rules), under the following terms and conditions, viz.:

1. That said Transit Co. and its connections, which receive said property, shall not be liable for breakage of packages, or for rust of iron and of iron articles, or for loss or damage by fire, or loss of weight, or for condition of baling, nor for loss or damage of any kind whose bulk requires it to be carried on open cars; nor for damage to perishable property of any kind, occasioned by delays from any unavoidable cause, or changes of weather; nor for loss or damage on any article or property whatever, by fire or other unavoidable casualty, while in transit or while in depots or places of trans-shipment, or at depots or landings at all points of delivery, nor for loss or damage by fire, collision, or the dangers of navigation while on seas, rivers, lakes or canals. All goods or property under this bill of lading will be subject at its owner's cost to necessary cooperage or baling, and is to be transported to the depots of the companies, or landings of the steamboats or forwarding lines, at the points receipted to for delivery.

2. It is further agreed, that said Transit Co. and its connections, shall not be held accountable for any damage or deficiency in packages after the same shall have been receipted for in good order by the consignees, or their agents, at or by the next carrier beyond the point to which this bill of lading contracts. Consignees are to pay freight and charges upon the goods or merchandise in lots or parts of lots, as they may be delivered to them.

3. And it is further agreed, that the carriers shall not be liable for any discrepancy between the contents of the packages and the description of the same in the bills of lading.

4. And it is further agreed, that from and after the arrival of said goods at the port of ..... and while said goods remain on the wharf or wharves, waiting for further conveyance, the Transit Co. shall not, nor shall any of its connections—inland or ocean—be liable for unavoidable delay, unless delay exceeds time named in clause 5, nor shall they, or any of them, be liable in respect of said goods, otherwise than as warehousemen. It is also agreed, that in case the whole, or any part of the property specified herein be prevented from any cause from going on the first steamer of the line above stated, leaving after the arrival of such property at said port, the Transit Co. is at liberty to forward the same by succeeding steamers of said line, or, if deemed necessary, in the steamers of any other line. And further, in the event of any goods coming forward without being manifested, charges incurred thereon arising from such omission to be paid by the carrier.

5. And it is further agreed, that this contract, on the part of the Transit Co. is accomplished and the liability of the Transit Co hereunder, terminates on the delivery of the goods or property to the steamship, or steamship line, her or its agents, or servants, or on the steamship pier at port of .....when the responsibility of the steamship or steamship line begins, and not before. And it is further agreed, that the within named goods are to be shipped per steamer or steamers to the port of.....to.....within one month from the date of this bill of lading, and that the Transit Co. shall obtain receipts from steamers for goods delivered to them, which receipts shall have the force of bills of lading.

It is mutually agreed, that in respect to the transportation from the port of..... to port of destination, the ship shall have liberty to sail without pilots; to tow and assist vessels in distress; to deviate for the purpose of saving life or property; that the carrier shall have liberty to convey goods in lighters to and from the ship at the risk of the owners of the goods; and, in case the ship shall put into a port of refuge, or be prevented from any cause from proceeding in the ordinary course of her voyage, to trans-ship the goods to their destination by any other steamship.

It is also mutually agreed, that the carrier shall not be liable for loss or damage occasioned by causes beyond his control, by the perils of the sea, or other waters, by fire from any cause and wheresoever occurring; by barratry of the master of the crew, by enemies, pirates, or robbers, by arrest and restraint of princes, rulers, or people, riots, strikes, or stoppage of labor; by explosion, bursting of boilers, breakage of shafts, or any latent defect in hull, machinery, or appurtenances, by collisions, stranding, or other accidents of navigation of whatsoever kind (even when occasioned by the negligence, default or error in judgment of the pilot, master, mariners, or other servants of the shipowner, not resulting, however, in any case, from want of due diligence of the owners of the ship or any of them, or by the ship's husband or manager); nor for heating, decay, putrefaction, rust, sweat, change of character, drainage, leakage, breakage, on any loss or damage arising from the nature of the goods or of the insufficiency of packages: nor for land damage; nor for the obliteration, errors, insufficiency or absence of marks, numbers, address or description; nor for risk of craft, hulk, or trans-shipment; nor for any loss or damage caused by the prolongation of the voyage.

I. It is also mutually agreed, that the carrier shall not be liable for gold, silver, bullion, specie, documents, jewelry, pictures, embroideries, perfumeries, works of art, silks, furs, china, porcelain, watches or clocks, in any respect, or for goods of any description whatever above the value of $20 per cubic foot, and in no case is the carrier to be liable beyond $500 per package, unless bills of lading are signed therefor, with the value therein expressed, and a special agreement is made.

II. Also, that shippers shall be liable for any loss or damage to ship or cargo caused by inflammable, explosive, or dangerous goods, shipped without full disclosure of their nature, whether such shipper be principal or agent; and such goods may be thrown overboard or destroyed at any time without compensation.

III. Also, that the carrier shall have a lien on the goods for all freights, primages and charges, and also for fines or damages which the ship or cargo may incur or suffer by reason of the incorrect or insufficient marking, numbering or addressing of packages, or description of their contents.

IV. Also, that in case the ship shall be prevented from reaching her destination by quarantine, the carrier may discharge the goods into any depot or lazaretto, and such discharge may be deemed a final delivery under this contract, and all expenses thereby incurred on the goods shall be a lien thereon.

V. Also, that the ship may commence discharge immediately on arrival, and discharge continuously, the collector of the port being hereby authorized to grant a general order for discharge immediately on arrival, and upon discharge the goods shall be at the risk of the consignee, and if not taken by him within such time as is provided by the regulations of the port of discharge, they may be stored by the carrier at the expense and risk of their owners, and the responsibility of the steamship or steamship line for merchandise to be carried at a through rate to a point beyond the port of discharge shall terminate on the delivery of the goods or property to the next carrier. But the carriers shall be bound to have manifest ready for inspection at least 24 hours before steamer is out of time.

VI. Also, that full freight is payable on damaged or unsound goods; but no freight is due on any increase in bulk or weight caused by the absorption of water during the voyage.

VII. Also, that if on sale of the goods at destination for freight and charges, the proceeds fail to cover said freight and charges, the carrier shall be entitled to recover the difference from the shipper.

VIII. Also, in the event of claims for short delivery when the ship reaches her destination, the price shall be the market price at the port of destination on the day of the ship's entry at the custom house, less all charges saved, except a lower value of the articles has been agreed upon with the shipper and such value noted hereon.

IX. Also, freight payable on weight, is to be paid on gross weight discharged or landed from ocean steamship, unless otherwise agreed.

X. Also, goods destined for a continental port, in the event of the continental steamer being prevented by ice from reaching destined port, the master reserves the liberty of either landing cargo at nearest open port he can reach with safety, or bringing it back to port of trans-shipment, in either case at consignee's risk and expense, but charging outward freight only; or, should the last steamer of the season have sailed for the above destined port, the goods may be sent to the port nearest to their destination with which there is direct communication or may be warehoused at the intermediate port at the expense and risk of the owners of the goods.

XI. Parcels for different consignees collected or made up in single packages addressed to one consignee, to pay full freight on each parcel.

And finally, in accepting this bill of lading, the shipper, owner and consignee of the goods and the holder of the bill of lading agree to be bound by all of its stipulations, exceptions and conditions, whether written or printed, as fully as if they were all signed by such shipper, owner, consignee or holder.

In witness whereof, the agent signing on behalf of the said Transit Co., and of the said steamer or steamship company severally and not jointly, hath affirmed to.....bills of lading, all of this tenor and date, one of which bills being accomplished and given up to the carrier, the others to stand void.

New Bill of Lading.

A bill of lading before congress, and already passed by the house, reads as follows: "Whenever any common carrier, by land or water, or its agent authorized to execute and deliver bills of lading, signs and delivers any bill of lading or instrument in the nature thereof, purporting to be for goods, wares, or merchandise received by such carrier for transportation from one state to another within the United States or to any foreign country, such bill of lading or instrument in the nature thereof, in the hands of any bona-fide holder for valuable consideration, who acquired the same in the usual course of trade without any notice of any defect therein, shall be conclusive evidence that the goods described therein were actually received by such carrier in the manner and for the purpose as therein stated."

Wisconsin Millers.

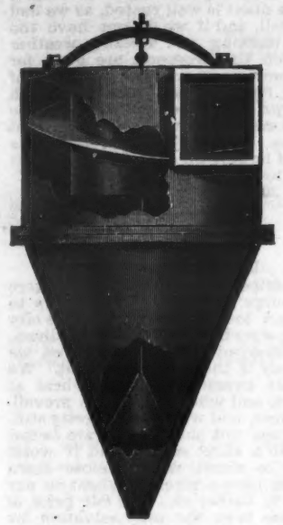
At the last meeting of the Fox River Valley association, at Appleton, Wis., no business of particular importance was transacted. Owing to the unsettled condition of freight rates, it was considered inopportune to make a demand for lower or special rates, but the committee on transportation was instructed to confer with general freight agents and demand an equal rate with our competitors to competing points.

The secretary was instructed to write S. H. Seamans, secretary of the Millers' National Association, asking him to furnish the association with interrogatory blanks for the purpose of making an association report to the National association.

The meeting then adjourned until Monday, March 5.

G. B. Reeve, Chicago manager of the Grand Trunk road, claims that there is no truth whatever in the statement that the dominion government refuses to allow Manitoba wheat to go through the United States and re-enter Canada free of duty.

VORTEX DUST COLLECTOR.



GREAT SUCCESS.

Guaranteed Not to Infringe on Any Other Dust Collector Patent.

NOTICE.

TO WHOM IT MAY CONCERN: We, the undersigned, give notice that we have transferred to the Vortex Dust Collector Co., of Milwaukee, Wis, all our right, title, interest and good will in and to our Dust Collector business heretofore carried on in Indianapolis, and they will hereafter be the sole manufacturers of the "Vortex." Mr. Eugene Bretney, our President and Manager, will superintend the manufacturing of said machine in the future.

THE BRETNEY DUST COLLECTOR CO.

This is undoubtedly the best machine on the market for Purifiers, Grain Cleaners and Elevators, or in connection with any dust producing machinery, and we respectfully solicit from our milling friends and the trade generally a share of the Dust Collector trade.

TESTIMONIAL.

Indianapolis, Ind., Feb. 16, 1888.

To whom it may concern: This is to certify that we have in our two mills twenty Vortex Dust Collectors, manufactured by the Bretney Dust Collector Co. We are very much pleased with the working of them in our mills. We have tried them thoroughly. At first we put in a few, until we now have twenty on our purifiers and wheat cleaning machinery. Too much can not be said in their praise. ACME MILLING CO.
By S. F. Robinson, Prest.

Special sizes built for Elevators and wood working machinery. Apply for prices before purchasing elsewhere.

No Power! No Attention! No Clogging!
Perfect Ventilation! Low Prices!

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Vortex Dust Collector Co., Milwaukee, Wis.

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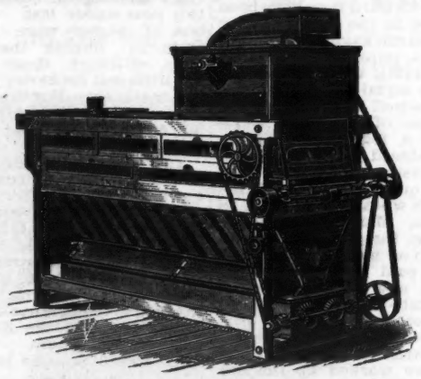

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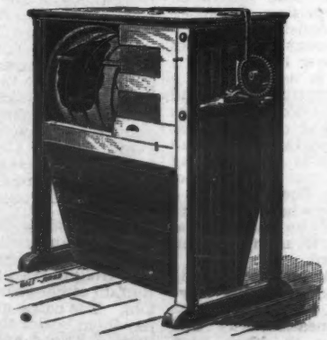

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THE MARKETS

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MINNEAPOLIS, Feb, 22.

There has been very little change in market conditions or values during the past week. Wheat has been firm and there was a slight advance at Chicago, but the general situation continues to wear a listless and depressed aspect. The statistical position is strong, but the slow decrease in the visible supply has no terrors for bears, while the bulls are timid and lack leaders with nerve and dash. The winter wheat crop reports promise to exercise more influence on values during the next two months than any other factor. Just at present they are not encouraging, but it is almost too early to consider them as final. The local situation is weaker, owing to heavier receipts, but there has been no decline, except on No. 1 northern.

*WHEAT.—The highest and lowest wheat prices by grade on 'change during the week ending to-day, closing prices, and the prices one year ago were:

	Highest.	Lowest.	Closing.	Feb. 22, 1887.
No. 1 hard	76¾	76½	76¾	76¼
No. 1 northern	75¼	74¾	74¾	75
No. 2 northern	72¾	72	72¾	73¼

*These prices are on wheat in store. Wheat on track, 1½@2c per bu higher.

Futures have been quite steady, March 1 hard closing at 76¾c, and May 78⅝c; March 1 northern 74¼c, and May 76¼c; March 2 northern 72¼c, and May 74¼c. Coarse grains are easier, corn closing at 43@44c, oats at 28@31c, and barley at 60@68c, all by sample.

FLOUR.—The season of low freights enabled millers to do quite a large export business, though on light margins, but while the foreign demand remains moderate, the rise in rates is expected to deaden it. There is a fair domestic inquiry, with reasonably steady values, but few report good business.

Quotations at the mills for car or round lots are: Patents, $4.10@4.20; straights, $3 90@4.05; first bakers', $3.50@3.65; second bakers', $2.85@3; best low grades, $1.80@1.90 in bags; red dog, $1.40@1.50, in bags.

☞These quotations are on flour in barrels, except as stated. The rule is to discount 25c per bbl for 280 and 140 lb jute bags, 30c for 98 lb cotton sacks, 15c for 49 lb cotton sacks, 10c for 24½ lb cotton sacks, and 15c for 49 lb paper sacks. In half barrels, the extra charge is 50c per bbl.

MILLSTUFF.—This market continues steady and quite active, with bulk bran selling at $13.50@14.25 and shorts at $14.50@15 per ton.

* *

The table below gives the direct exports of flour to foreign countries from Minneapolis for a series of weeks ending on the dates given:

1887-8.	Bbls.	1886-7.	Bbls.
Feb. 18, 1888	55,000	Feb. 19, 1887	36,550
Feb. 11	38,500	Feb. 12	44,900
Feb. 4	33,200	Feb. 5	32,300
Jan. 28	29,600	Jan. 29	34,000
Jan. 21	37,500	Jan 22	31,000
Jan. 14	32,000	Jan. 15	37,600
Jan. 7	36,300	Jan. 8	49,000
Dec. 31, 1887	37,400	Jan. 1	31,750
Dec. 24	44,800	Dec. 25, 1886	35,760
Dec. 17	46,000	Dec. 18	47,650
Dec. 10	45,550	Dec. 11	53,810
Dec. 3	37,750	Dec. 4	35,300
Nov. 26	42,150	Nov. 27	41,000
Nov. 19	48,750	Nov. 20	40,350

* *

The following were the receipts at and shipments from Minneapolis for the weeks ending on the dates given:

RECEIPTS.	Feb. 21.	Feb. 14.	Sept. 1 to Feb. 21.
Wheat, bus	760,950	676,590	29,477,160
Flour, bbls	1,225	1,800	18,790
Millstuff, tons	119	204	3,814
SHIPMENTS.			
Wheat, bus	178,980	178,410	6,747,180
Flour, bbls	126,912	110,949	3,180,448
Millstuff, tons	3,464	4,511	95,767

* *

The wheat in elevators in Minneapolis, as reported by the chamber of commerce, as well as the stock at St. Paul and Duluth, is shown below:

	Feb. 20.	Feb. 13.
No. 1 hard, bus	2,447,495	2,390,020
No. 1 northern, bus	2,550,920	2,509,591
No. 2 northern, bus	1,171,320	1,191,622
No. 3 bus	35,707	35,707
Rejected, bus	12,130	11,511
Special bins, bus	1,174,788	1,159,92
Total, bus	*7,390,954	*7,275,424
Amount in store same date last year	7,650,496	7,593,176

*These figures do not include a considerable quantity of wheat in private elevators and on track, nor that in mills.

ST. PAUL.

	Feb 21.	Feb. 14.	Feb. 7.
In elevators, bus	420,000	400,000	395,000
Same date last year	865,000	820,000	827,000

DULUTH.

	Feb. 18.	Feb. 11.	Feb. 4.
In store, bus	6,952,093	6,935 783	6,902,154
Same date last year	10,369,630	10,369,630	10,266,730

* *

The visible supply of grain in the United States and Canada, and in transit by water, as compiled by the secretary of the Chicago board of trade, was as follows on the dates named:

Bus.	Feb. 18,'88.	Feb. 11,'88.	Feb. 19, '87.
Wheat	39,565,687	40,237,128	59,880,370
Corn	8,442,814	8,501,907	16,568,620
Oats	5,001,404	5,229,545	4,572,427
Rye	367,014	380,557	450,256
Barley	2,737,216	2,801,985	2,008,071

Wheat decrease for the week, 721,441 bus.

* *

The war among the eastern trunk lines is practically over, a compromise having been patched up by the trunk line commission and the western roads. The Burlington is still getting the lion's share of the flour freight. The demoralization among the western trunk lines is expected to end by a restoration of rates on the 25th, on the basis of 7½c on the Burlington and the Kansas City line, and transit and a flat rate of 12½c on the other Chicago lines. The all rail rates here quoted apply only to the Burlington and Kansas City lines on through freight. The Wisconsin Central continues its rate, in connection with the cross lake lines, 2c below the all rail rates here quoted. All rail and lake and rail rates are as follows (in cents per 100 lbs):

Minneapolis to	All rail.	Via Mil. across Lake.
Chicago	7½	
Buffalo	22½	20½
Albany	31½	29½
New York	32½	30½
Philadelphia	30½	28½
Boston	37½	35½
Baltimore	29½	27½
Portland	37½	35½

Ocean business is very dull, the rise in rates to the old form shutting off business. Present rates promise to be firm for a time. Quotations are as follows (in cents per 100 lbs):

Chicago to	Via New York.	Via Boston.	Via Baltimore.	Via Philadelphia.
Liverpool	8.43	8.43	----	8.43
London	12.65	12.65	13.00	----
Glasgow	14 06	14.06	13.00	14.06
Leith	12.65	----	----	----
Bristol	12.65	----	14.00	----
Antwerp	14.06	----	----	11.25
Hull	16 87	----	----	----
Newcastle	16 87	----	----	----
Dublin	21.09	----	----	----
Belfast	24.18	----	16.00	----
Dundee	21.09	----	----	----
Londonderry	25.21	----	----	----
Cork	28.12	----	----	----
Sligo	28.71	----	----	----
Rotterdam	16 00	----	21.00	----
Amsterdam	16.00	----	23.00	----
Bremen	20.00	----	----	----
Hamburg	17.50	----	----	----
Aberdeen	24.00	----	----	----

The Glasgow Market.

[Special cable report to the NORTHWESTERN MILLER from F. & J. Cassels, flour importers, 53 Waterloo street.]

GLASGOW, Feb. 22.—Flour has a dragging sale. Prices are nominally unchanged, but where sales are pressed, buyers have the advantage and quotations are to a great extent nominal.

Spot prices per 280 lbs, delivered terms, are: Spring—first patents, 28s second patents, 27s; straights, 26s 6d; prime bakers', 24s; second bakers', 23s; low grades, 14s@20s. Winter—first patents, 28s; second patents, 26s 6d; extra fancy, 25s 6d; fancy, 23s 9d@24s 3d; choice, 22s 9d; family, 20s 9d@21s 3d; Canada patents, 24s 9d@25s 3d.

The Boston Market.

[Special telegraphic report from H. B. Goodwin & Co., 15 India street. Consignments solicited.]

BOSTON, Feb. 22.—Trade has been dull during the week and sales have been confined to the immediate necessities of jobbers. These were not extensive, although retailers' stocks are light and while stocks in store at principal New England distributing points are very small, but little flour is being placed with the jobbing trade at interior points. Some Minneapolis millers are offering fancy patents at $4.85 and have placed considerable. The majority are asking $4 90, and only two firms demand $5. Favorite brands from well known mills are being offered at $4 85. Spring straights and bakers' are very dull. There is a fair demand for New York and Michigan straights. Millers have reduced their prices slightly the past few days on St. Louis, Illinois and Missouri roller straights and clears, still their ideas are about 15c above the views of buyers here.

Quotations are as follows: Spring—Minnesota patents, extra fancy and favorite brands, $4 80@5; Minnesota and Wisconsin patents, choice to fancy, $4.70@4 80; Minnesota fancy straights, $4 20@4.40; Minnesota and Wisconsin bakers' clears, $3.85@4.20; common and shipping extras, $3@3.50; red dog and superfine, $2 50@3. Winters—St. Louis, Illinois, Indiana and Ohio patents, $4.65@4.80; St. Louis and Illinois roller straights, $4.35@4.50; St Louis and Illinois roller clears, $4 10@4.35; Ohio and Indiana roller straights, $4 35@4 50; Ohio and Indiana roller clears, $4.10@4 35; New York state and Michigan roller straights, $4.15@4.40; New York state and Michigan roller clears, $4@4.15; Michigan stone ground, $4.@4.15; common to choice extras, $3@3.60; superfine, $2.75@3. Millstuff—Spring wheat bran, bulk, per ton, $21.25@21.75; winter, $22@22 50; spring wheat middlings, bulk, per ton, $21 50@22; winter, $22@23. Sacked 50c@$1 more.

MILLING IN MICHIGAN.

Michigan is one of our oldest milling states and has been noted for her extensive milling interests for many years. Some of her millers have been in the business for a lifetime and their brands of flour are a household word in many New England towns. The millers of Michigan were among the very first to adopt the new process or high grinding system of milling and from that time forward they have been among the first in the field to adopt any new ideas which have been brought out that would improve the quality and yield of mills, until to-day our mills are fully equal to any in this country. As is well known to many, Michigan is one of the main white wheat states. A few years ago the farmers introduced a variety well known as Clawson wheat. The flour dealers raised quite a stir against the flour from this wheat, on account of lack of strength. Many of our millers, in order to keep the strength of their flour up, and to encourage the raising of red wheat, paid more for it than for white, and now in the southern part of the state there is more red than white wheat raised, quite a proportion which is of the Mediterranean, or Lancaster varieties, and now, when the millers have worked up the raw material to get the desired strength, the critical flour man in the east says: "A little more white, if you please," which after all demonstrates that there is a legitimate demand for good white wheat flours. The Michigan farmers are an enterprising and intelligent class, and are constantly experimenting with different varieties of wheat. They are now introducing a new variety which is composed of a cross between the Deihl white and Mediterranean red. The writer has milled a large amount of this wheat from the farm of Gov. Luce, who is an extensive farmer. It is good milling wheat, combining the elements of strength and color. There will be a large amount of this wheat raised in the future, which will be instrumental in keeping Michigan flours up to their present high standard.

The mills have not run very strong this winter. Although offals have brought good prices, the flour markets have been very unsatisfactory and mills cannot be run to make bran alone. So far our wheat crop is safe. As has been already stated in the NORTHWESTERN MILLER, our wheat fields have been better protected than those of any other state, but the past week we have had a thaw, and many spots will be bare, but the plant is well rooted, as we had a late fall, and if we do not have too much thawing and freezing weather in March, the prospects are good for the coming crop. The receipts of wheat for the past month, though not large, have been sufficient for the requirements of the mills in most sections. The majority of the mills depend largely on car wheat. Detroit prices to-day are 85½c.

Feb. 20, 1888. SIGNO VINCES.

BUFFALO BOLTS.

[Special Correspondence.]

A number of out of town millers were on 'change Friday. "We came up to visit and look on, to see how the city millers were buying," said one of them. The same miller said: "O, yes, we may buy if the market is right. We are not overstocked with wheat at present, and with flour at the prevailing prices, and wheat held pretty stiffly, we are not sure but we are better off with a short supply, and if worst comes to worst, we can close down and not have a stock of wheat on our hands to bother us. The fair price of feed has been the only salvation for New York state millers, I can tell you that. We have had a pretty good trade on mill feed, and it seems to keep up at reasonable prices."

Some later developments showed, however, that the visiting millers were quite anxious to buy, although the market was higher than their views, and they were at loggerheads to decide on just the right course to take. Had the market taken a slight decline, it is safe to say that last Friday would have seen the visiting millers make liberal purchases. As it was, something like 12 000 bus of No. 1 hard sold at 90½c, and 2 500 bus at 90⅝c. Of No. 1 northern 5,000 bus found purchasers at 88½c. This was the usual quotation over Chicago May. Winter wheat was held higher, although the demand was light. The prices were slightly affected by Detroit holding up on the 1,600,000 bus No. 2 shortage in store in New York this year under last. Nearly 100,000 bus of barley were taken out of store in Buffalo the past twelve days, although there seems to be but little call for barley from the Buffalo maltsters. For the week ending Saturday there was shipped from Buffalo 69,700 bus wheat; 4,000 bus corn and 13,400 bu oats.

The mills at Buffalo, Lockport and Niagara Falls are running quietly, and hoping for a better flour market.

Plans are under consideration for the conversion of Groesbeck Bros'. warehouse at Clyde, N. Y., into a flouring mill of improved design, and to have a capacity of 100 to 150 bbls per day. The building is conveniently situated to the Erie canal and two trunk lines of railroad, the New York Central and West Shore.

A new mill is to be built at Savannah village, N. Y. EDD.

Buffalo, Feb. 20.

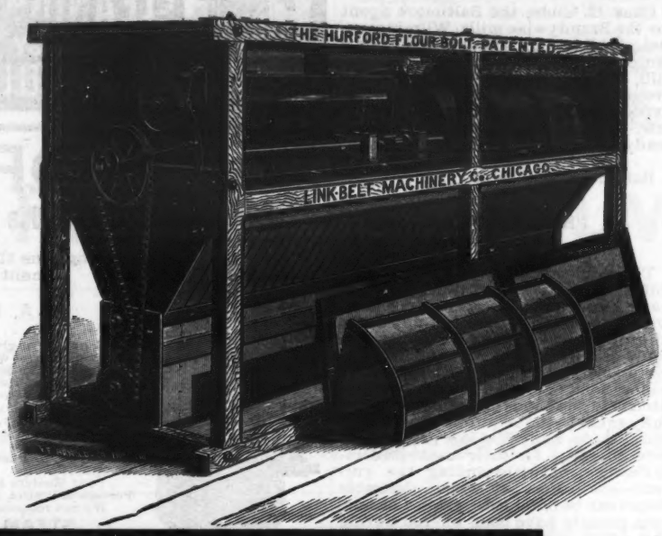
The Farmers' Union Elevator Co. has begun suit against the Syndicate Insurance Co. for $1,351.37, to cover a loss sustained in the burning of an elevator at Hawley, Minn. The elevator was not included in the list of elevators in the insurance policy, but the plaintiffs allege that the omission was a mistake in making out the papers. The same company also sues the Lancashire Insurance Co., the American Fire Insurance Co., the Queens Insurance Co., of Liverpool, and the Fire Insurance Co. of Philadelphia.

It is stated by the railroad men that the lake transportation companies have made arrangements to give the same lake freight rates between Duluth and Buffalo as between Gladstone and Buffalo. The cause of this is that it will pay them better to go to Duluth, where there is a good harbor and good facilities and where they can be sure of cargoes both ways.

HURFORD BOLT and SCALPER.

The ONLY Round Reel with INSIDE BRUSH,

AND NO ROUND REEL WILL DO SATISFACTORY WORK WITHOUT IT.



HURFORD

REELS · AND · SCALPERS

Are furnished in one, two and four reel chests, 8 feet, 10 feet, 12 feet, or 14 feet long.

IS EXTENSIVELY USED to replace six sided reels in old chests, doubling the capacity and greatly improving the quality.

NO CHANGE OF DRIVING Gear necessary.

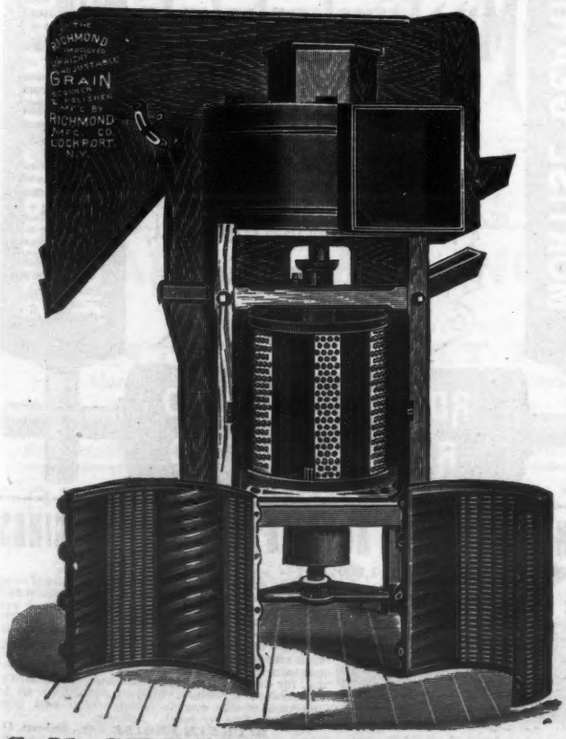
PILLSBURY HAS THIRTY Hurford Reels doing the work of sixty six sided reels in the "A" mill.

Link-Belt Machinery Co. SOLE MANUFACTURERS.

BURR & DODGE, Philadelphia. CHICAGO. MINNEAPOLIS. NEW YORK.

WE DON'T WANT YOUR MONEY

UNLESS WE CAN GIVE YOU VALUE RECEIVED FOR EVERY DOLLAR. WE BEAR OUT IN ACTUAL SERVICE ALL CLAIMS MADE FOR



THE "RICHMOND"

Grain Cleaning Machinery and Bran Dusters.

READ VERDICTS NOS. 42 AND 43.

ANCHOR MILLING CO., ST. LOUIS, Mo., Aug. 28, 1886.

Richmond Manufacturing Company, Lockport, N. Y.

Gentlemen: In reply to yours of the 21st, asking if I got the Dusters and Wheat Scourer running, I will say: I have the No. 7 Horizontal dusting ship stuff, and the No. 4 I have on germ; and will say that I am well pleased with the machines, as they do first class work. The Scourer fills the bill to the letter. All your machines are giving us entire satisfaction. Respectfully, ANCHOR MILLING CO.

DAN. I. FOLEY, Head Miller.

THE SEIBERLING MILLING CO., AKRON, Ohio, Feb. 28, 1887.

John McLean, Secretary Richmond Manufacturing Company, Lockport, N. Y.

Dear Sir: We have used your Bran Dusters, Brush and Separator constantly for the last four years, and believe no better machines are made.

Yours truly, THE SEIBERLING MILLING CO.

Richmond Manufacturing Company,

LOCKPORT, N. Y.

Manufacturers of the Largest and Best Line of Upright and Horizontal Grain Cleaning Machinery and Bran Dusters in the World.

C. M. GILBERT, Gen'l Agt., Office 24 Corn Exchange, Minneapolis, Minn. H. E. RICHARDSON, S. W. Agent, Box 486, St. Louis.

Charles H. Dorsey, Baltimore Agent, Corn and Flour Exchange.

These are exasperating times. It is again necessary to report the flour market in a dull and unsatisfactory state. A little more trading was noticeable to-day than for a week past, but not sufficiently heavy to alter the status of the market. The receipts have been unusually large this week, principally however, for through shipment, and from which our merchants derive no benefit. The northwestern railroads, of which your readers are doubtless cognizant, are giving through rates of freight to European markets cheaper than to our seaboard cities. This they continue to do, it seems, until they have made engagements for months ahead, and if a protest is entered from those suffering by their action, they then restore the rates to their former legitimate basis, knowing full well when they do so that they will again resort to the same contemptible practice just as soon as the occasion arises. No wonder our merchants are discouraged! They have every reason to be, with such odds against them, and this is not only so with regard to flour, but grain is also being contracted for in like manner. Until these discriminations and abuses are corrected, there can be no healthy improvement in business from this quarter.

Winter wheat flour is scarce, while springs are abundant. Minnesota patents have been offered as low as $4.65, and at this figure some sales have been recorded. Other brands, more desirable, are held at $4.70@4.80, but at these prices a comparatively slow demand prevails. Winter has broken, navigation is open, and jobbers are more disposed to anticipate their wants City millers are doing only fairly well, the majority of them now running ahead of orders. The receipts of flour this week were 89,437 bbls.

While the wheat market has fluctuated considerably during the week, it nevertheless closes about where it did last Saturday. The stock in elevators shows a decrease of 100,000 bus. The speculative interest, so long dormant, is now perceptibly reviving, and particularly as to corn. Desirable lots of winter wheat are very scarce, and, if it could be had, would bring good prices from both the millers and shippers. Owing to our light stock we continue to keep even with New York in values and our May option is still bringing a slight premium over that market. Oh for a revival of the old-fashioned activity, when we were too busy to mope and to groan, too busy to complain and to attend to other people's business, as it has become the order of the day to do! The receipts of wheat this week were 16,083 bus. The stock in store is 814,014 bus.

Exports of flour, wheat and corn from Baltimore for week ended Feb. 16 were:

Destination.	Flour, bbls.	Wheat, bus.	Corn, bus.
London	21,006	.....	.....
Glasgow	8,465	.....	.....
Belfast	12,924	.....	.....
Bristol	20,749	12,000	17,142
Liverpool	5,035	12,000	51,426
Rio	4,328	.....	.....
Pernambuco	7,000	.....	.....
Para	16	.....	.....
Santos	2,300	.....	.....
Parahiba	1,500	.....	.....
Coastwise	5,360	.....	.....
Total	89,682	24,000	68,570
From Jan. 1, 1886	358,922	457,969	727,475
Same time in 1885	525,735	1,280,742	1,868,256

Our latest revised quotations are as follows:

Ohio, Indiana and Illinois super	$2.37@2.85
Ohio, Indiana and Illinois extra	3.00@3.75
Ohio, Indiana and Illinois family	4.00@4.50
Winter wheat patent	4.50@5.00
Minnesota patent	4.70@4.80
Patapsco superlative winter wheat pat	5.50
Baltimore high grade family	5.15
Baltimore first grade extra	5.05
Baltimore choice grade extra	4.90
Maryland, Virginia and Penn's super	2.37@2.75
Maryland, Virginia and Penn's extra	3 00@3 60
Maryland, Virginia and Penn's family	4.00@4.35
City mills super	2.37@2 60
City mills extra	3.00@3.75
City mills (Rio brands extra)	4.75@5.00
Fine flour	2.15@2.35
Rye flour	3.25@3.50
Hominy, per bbl	3 85@3.95
Corn meal, per 100 lbs	1.30@1.35

Chas. H. Gibbs, the Baltimore agent for the Brandywine mills, Wilmington, Del., exhibited on 'change this week a sample of hominy made at their new mill, by machinery invented by the proprietors, which is pronounced by experts to be the handsomest they ever saw. Mr. Gibbs is meeting with a ready sale for it.

CHARLES H. DORSEY.

Baltimore, Feb. 18.

PHILADELPHIA.

[Special Correspondence.]

The flour market presents the same dull and unsatisfactory features which have been noted for some time past, with little or no prospect of any early improvement. Demand for all descriptions is unusually light and inducements in the shape of moderate price concessions fail to attract buyers. Stocks in the hands of jobbers continue fully equal to the requirements of their retail trade, and this, in a great measure, accounts for their continued indifference, notwithstanding the current low prices at which desirable flours can be obtained. Choice Minnesota patents have been offered during the entire week at $4.85@4.90, but I have heard of no transactions aside from a few small lots. Some dealers claim to be able to reach $5 for a few favorite brands, but this is a very exceptional rate, and does not fairly represent the wholesale market. Spring clears are very sluggish. I have heard of sales this week at 10@15c decline, one brand selling as low as $3.85. Fancy straights are scarce and the best, which are occasionally inquired after, will bring $4 50. In winter flours there is no change to note. The movement is very light and prices remain as last quoted. There is some export inquiry for city mill grades, but no foreign demand whatever, for western goods. Receipts during the past week were 18,456 bbls, making a total since the 1st inst of 49,109 bbls, against 70,023 bbls during the same time last year.

The following are quotations for car lots to local jobbers:

Western winter supers	$2.50@2.75
Western winter extras	2.75@3 00
Western winter No. 2 family	3.25@3.50
Ohio and Illinois clear	4.00@4.25
Ohio and Illinois straight	4.25@4.40
Indiana clear	4.00@4.20
Indiana straight	4.20@4.40
Western winter patent	4.40@4.75
Minnesota clear	3.85@4 20
Minnesota straight	4 25@4.50
Minnesota patent	4 75@4.90

Speculators have manifested no interest whatever in the local wheat market and price fluctuations have been wholly in sympathy with those in other grain centres. There has been a rather better inquiry from shippers, but business in this market has been restricted by light offerings and the strong views of holders of cash property. Millers have bought very sparingly. Prices of spot No 2 red have ranged between 89½@90½c, opening Monday at 90½c and closing to-day at 90½c. Exports during the week were only 18,000 bus, making a total since Jan. 1 of 139,500 bus, against 1,101,280 bus during the same time last year. The stock here is 403,327 bus.

The Market Street Milling Co. is selling the bulk of its product to shippers.

Millers are obliged to pay such high prices for choice wheat that there is little if any profit in the manufacture of flour.

The "British Prince" took 6,000 bags of flour to Liverpool.

There is very little demand for western millstuff, the product of the local mills supplying the bulk of the requirements of the trade. Spring bran is worth $20@20.50 per ton and winter ranges from $20.50@22 per ton as to quality, the outside rate for fancy flaky feed.

QUAKER.

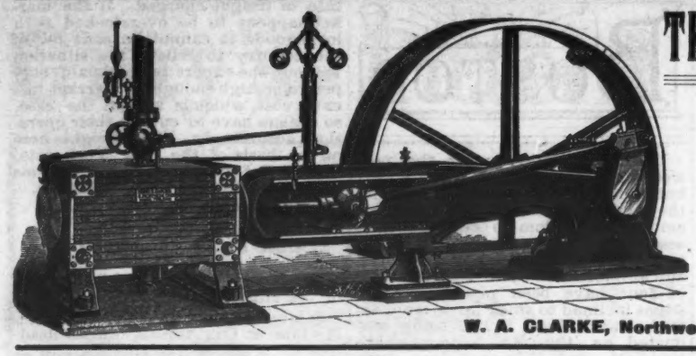
Philadelphia, Feb. 18.

THE STANDARD OF EXCELLENCE EVERYWHERE
EUREKA
GRAIN CLEANING MACHINERY.
OVER 24,000 IN USE.
BUILT ONLY BY
HOWES & EWELL · SILVER CREEK · N.Y.

The VICTOR HEATER
Is in Use in the Best Mills in the World.
It Toughens the Bran and Germ, and the Improvement on the Flour is Marvelous.
C. A. PILLSBURY & CO. USE 75.
Your Heater gives entire satisfaction.—C. A. Pillsbury & Co.
Your Heaters work admirably.—Blish Milling Co., Seymour, Ind.
They are the boss Heaters.—W. & F. Thorp, Wood River, Neb.
Your Heaters are working finely, don't want anything better.—Salina Mill Co., Salina, Kas.
Your Heaters give satisfaction in every respect.—Mandan Roller Mill, Mandan, Dak.
We like your heaters very much.—Nelson, Storey & Co., Bozeman, Montana.
The Victor Heaters work to entire satisfaction.—Bennett & Gates, Geneva, Ill.
Your Heaters are giving every satisfaction.—Portage Milling Co., Portage la Prairie, Manitoba.
We can recommend the Victor.—Henkle, Tallman & Co., Keota, Ia.
STEAM GENERATORS FURNISHED.
SEND FOR CIRCULAR.
VICTOR HEATER CO., 319 Nicollet Ave., Room 20, Minneapolis.

IMPROVED ROLLER MILLS
PULLEYS, SHAFTING MORTISE GEARING.
TODDS & STANLEY MILL FURNISHING CO.
SAINT LOUIS, MO.,
Office No 917 N. 2nd St.
Plans & Estimates furnished, Expert sent, when requisite, Correspondence Solicited.
FLOUR MILL SUPPLIES EVERY DESCRIPTION.
ROLLS RE-GROUND & RE-CORRUGATED.
WITTENBERG & SORBER

NEW TANGYE BUCKEYE AUTOMATIC CUT-OFF ENGINES
25 to 1,000 H. P.
In use, over 1,000
These engines are the combined results of long experience with automatic cut-off regulation and most careful revision of all details. They are designed and constructed for heavy and continuous duty at medium or high rotative speeds. Highest attainable economy in steam consumption and superior regulation guaranteed. Self-contained Automatic Cut-off Engines, 12 to 100 hp, for driving dynamo machines, A SPECIALTY. Illustrated circulars, with various data as to practical steam engine construction and performance, free by mail. Address
BUCKEYE ENGINE CO., Salem, O.
SALE AGENTS: W. L. Simpson, No. 18 Cortlandt St., 301 Telephone Building, New York; N. W. Robinson, cor Clinton and Jackson Sts., Chicago; Robinson & Cary, St. Paul, Minn.; G. B. Wormser & Sons, St. Louis, Mo.



THE HAMILTON-CORLISS ENGINE

Made in All Sizes, from 30 to 1,000 Horse Power.

Non-Condensing, Condensing, Compound. Horizontal or Vertical. Single or in Pairs.

We GUARANTEE OUR ENGINE EQUAL to any made, in ECONOMY, STRENGTH, FINISH or WEIGHT, and solicit correspondence.

The Hooven, Owens & Rentschler Co.

W. A. CLARKE, Northwestern Agent, 222 Third Ave. S., Minneapolis. HAMILTON, OHIO.

JOHN MARTIN, President. J. K. SIDLE, Vice President. H. W. HOLMES, Treasurer.

SIDLE FLETCHER HOLMES CO.

MANUFACTURERS OF THE

Best · Grades · of · Roller · Granulated · Flour

FROM SELECTED MINNESOTA AND DAKOTA HARD WHEAT.

NORTHWESTERN MILL, - - - MINNEAPOLIS, MINN.

BLISH MILLING CO.

SEYMOUR, IND.

MANUFACTURERS OF HIGH GRADE

WINTER · WHEAT

· FLOUR ·

We grind nothing but the best long berry wheat, and solicit correspondence from cash buyers.

ALBION · MILLING · COMPANY,

ALBION, MICHIGAN,

MANUFACTURERS OF

High Grade Winter Wheat Flours

FROM SELECTED WHEAT.

Sacked Mill Feed, **FREE FROM GROUND SCREENINGS,** a Specialty.

Correspondence Solicited.

Market Street Milling Co.

PHILADELPHIA, PA.

Winter Wheat Flours

FOR HOME TRADE AND EXPORT A SPECIALTY.

Blanton, Watson & Co.

ARCADE MILLS,

INDIANAPOLIS, - IND.

Invite correspondence from direct buyers of winter wheat flour.

SPARKS · MILLING · CO.

ALTON, ILLINOIS

MANUFACTURERS OF THE HIGHEST GRADES OF

WINTER WHEAT FLOUR

Unexcelled for Uniform Quality and General Excellence.

Grinding a mixture of "Great American Bottom" and the famous No. 1 "Hill" wheat of this region, we claim our best grades, while equalling any in *color*, to be the *strongest* winter wheat flours in the market. Correspondence solicited from direct cash buyers.

ESTABLISHED 1855. CAPACITY 750 BARRELS PER DAY

Fountain City Milling Co.

FOUNTAIN CITY, WIS.

We manufacture high grade spring and winter wheat flours and invite the correspondence of direct cash buyers.

McDANIEL & CO.

Manufacturers of High Grade

Winter Wheat Flours

FRANKLIN, IND.

Correspondence solicited from cash buyers.

PATAPSCO FLOURING MILLS.

ESTABLISHED 1774.

PATAPSCO 196 SUPERLATIVE PATENT C.A.GAMBRILL MFG.CO. BALTIMORE.

Patapsco Superlative Patent,

THE PREMIER FLOUR OF AMERICA.

The superiority of this flour has long been conceded. It stands unrivaled, not only in this country, but also in Europe, where it commands more money than the best Minnesota patents, because it makes the whitest, sweetest and most nutritious bread.

CHESAPEAKE CHOICE EXTRA

Is manufactured expressly for the South American markets, where it ranks second to none by reason of its fine baking and keeping qualities, which make it peculiarly adapted to the tropical climate

C. A. GAMBRILL MFG. CO., 214 Commerce Street, BALTIMORE.

ABSOLUTELY PURE

OLD FASHIONED

BUCKWHEAT FLOUR.

STILLMAN WRIGHT & CO.

Merchant Millers, Berlin, Wis.

Guarantee their Buckwheat Flour to be perfectly pure, and will furnish affidavit to that effect, if desired.

Manufacturers of Rye Flour on Full Roller Process.

Write for delivered prices, any quantity.

McDANIEL'S SYSTEM OF MILL BOOK-KEEPING.

Millers doing a wholesale, retail and exchange business write for circulars and prices.

C. W. McDANIEL, Franklin, Ind.

F. W. STOCK,

HILLSDALE, MICH.

Hillsdale City and Litchfield Roller Mills

Capacity 1,000 Bbls Per Day,

Cash buyers both export and domestic, desiring HIGH GRADE WINTER WHEAT FLOURS, are invited to correspond.

P. S. For sale cheap, a second hand 30 inch Leffel water wheel, in globe, with tubing.

WINTER WHEAT.

Our Special Report on Crop Prospects and the Milling Supply.

There has been a very decided change in the weather conditions of the winter wheat district since my report of Feb. 10. With the exception of some small areas in Michigan, and the states of Pennsylvania and New York, the entire crop is now bare of snow. From the 13th until the 16th inst there was more or less freezing and thawing weather. From the 16th to the 19th beautiful spring like weather, followed by a very sudden and severe freeze. The prospects now are that there is an entire difference in the coming out of the early and the late sown wheat, and this season this will cut a much more important figure in the crop than usual, for the reason that a very large percentage of the crop was sown late. We are now in the midst of the first critical period of the trials and struggles of the winter wheat crop of 1887 and 1888. The movement of winter wheat, while it has been small so far during February out of farmers' hands, is even smaller at present than at any time since harvest, with no probability of any change until we have some definite facts either for better or worse as to the final outcome of the crop.

With the mercury way down to zero, with the ground generally full of water, it seems strange that the facts are that wheat is growing very rapidly in Texas and the early seeding especially in fine condition. There is very little if any complaint of the seeding being frozen out and the prospects now point to the largest crop Texas has ever grown. Reports from upper east Tennessee to the Virginia line are favorable. From the territory tributary to Nashville, the reports are not as good. This applies particularly to the late sown wheat. Mills are bringing their stock from beyond the Ohio river. Reports on the whole from Kentucky are not of a very encouraging character at present. The wheat was seeded late and has been bare of snow all winter. There is a very fair demand for flour and millers seem to be encouraged at the outlook.

Leaving the territory south of the Ohio river and commencing east of New York, where they have had a general thaw, we still find considerable snow on the wheat and so far no complaints as to the condition of the crop. The flour trade is very quiet. In Pennsylvania the last few days have been mild, but still the fields are under snow and ice. I have reports from all the important localities in Ohio. As a whole they are very much mixed. The ground is now bare and has been so for ten days. From the 13th to the 20th inst, there was more or less freezing and thawing weather, and the late sown wheat particularly has a weakly appearance. It went into winter very short and apparently thin on the ground. It had no opportunity to get growth enough to stool before freezing weather commenced. The wheat plants look brown with scarcely any green visible. The outcome is uncertain; another correspondent says: "Three weeks at least the fields were covered with ice, hugging the plants so tightly that the late sown looks sickly and much of it has already perished." It is rather remarkable that there should be such a general uniformity in the reports as to the condition of the wheat crop of Ohio. While many express the idea that it is very hazardous to make any predictions at present as to the outcome of the crop, all agree that the crop entered the winter with very small growth and that the present cold weather is very detrimental.

In southern Indiana, with a week of alternate freezing and thawing, some damage already has resulted to the growing crop. The present freezing weather is reported from the central portion of the state as very hard on wheat, and that the prospect for the new crop is not as flattering as twenty days ago. Reserves in farmers' hands are very light and they will not sell at present except sparingly and unless compelled to. Many local mills are offering five cents premium in order to keep running. A good many mills are running altogether on export orders, and were it not for the high prices for feed the millers think—and which is probably the case—they would be working at a positive loss.

What has been said with regard to the general condition of the wheat crop of Ohio and Indiana applies, with the exception of snow, with equal force to Michigan. Wheat in Michigan had a covering of snow from Christmas up to the present time. It went into winter quarters, however, with very small growth. The mild weather of the week ending Feb. 18, began to make bare spots and show that the wheat and the plants look sickly. Good conditions are required to bring it out into a full crop. Wheat does not come out of farmers' hands, though they have had the finest sleighing of the whole season during the last 30 days. There is very little in warehouses and from 25 to 30 per cent is reported back in farmer's hands.

The late wheat in southern Illinois suffered last week considerably from freezing and thawing weather. Some of my correspondents report from personal examination that they have pulled up a great deal of wheat which was sown late and it is apparently dead. The wheat has just gone through a very heavy freeze up to the 16th inst, when the weather changed to mild and spring-like. Sunday night came a severe and sudden change and everything again froze solid. Farmers have stopped delivering wheat. The probabilities are that they will not resume until more is known about the condition of the crop. Millers in southern Illinois have very light stocks on hand and they cannot buy in St. Louis without heavy loss.

This area which I have just gone over, comprising Michigan, Indiana, Illinois and Ohio, yielded in 1887 in round numbers 132,000,000 bus of wheat, and is the most important portion of the winter wheat belt. The reports from these states bring out very forcibly this fact: That the late sown wheat to day is in a weakly condition. I am trying to ascertain, and I trust with some degree of success, what portion of the crop in these states was seeded late. At present I put the percentage of late sown wheat very conservatively at forty per cent of the entire acreage. The last ten days and with the opening of the present week has been the most trying weather on the crop. There is very little movement of wheat out of farmers' hands and country mills are carrying very light stocks.

From Missouri the reports come of very mild weather, with the mercury suddenly changing down to zero on the 15th inst, since which date there was mild weather again, and on Sunday night sudden, severe freezing weather. The ground is entirely bare and the wheat plants generally small. There is considerable doubt and uncertainty with regard to the condition of the crop. It looks to me to-day as if the condition of the wheat in Kansas was better than in any other state in the winter wheat belt. The weather has been more uniform than in any other of the states composing the winter wheat belt. At the same time the wheat plants are reported as not strong and the reserves of wheat are thought to be less than in any previous February for ten years in Kansas.

NIL MELIOR.

F. B Kelly, a member of the elevator firm of A. C. Dodge & Co., of Milbank, Da., died at the Nicollet house, Minneapolis, Feb. 14. The cause of death was inflammatory gastritus, resulting from unfortunate excess. Deceased was about 38 years of age and has lived at Milbank for three or four years. He was well and favorably known among Minneapolis wheat men. His widowed mother lives in Greenfield, Mass.

The second trial of Jas. W. Sykes at Chicago, on the charge of issuing fraudulent warehouse receipts and defrauding the Merchants' loan and trust company out of a large sum of money, is set for Feb. 27.

BOSTON.

The flour trade during the past week has been quiet, taken as a whole, but as buyers were short of supplies they have purchased with a fair amount of freedom to keep up their assortments. There has been no giving way in prices on the part of the mills, and at quotations some very fair lines of flour have been placed. No one seems inclined to stock up to any extent, and business is still being conducted on the old hand-to-mouth principle, and if transactions have been larger it is because the trade happened to be in need of the goods. The trade seem to be rather of the opinion that there is not much chance of flour going lower on this crop, and they would be fairly disposed to buy freely and stock up some, were it not for the fact that they have got out of that way of doing business. They have found it so satisfactory to buy only as they need the goods, that there seems to be no necessity for them to attempt to get out of this rut, especially as they can see no inducement for running any risk. The competition for trade has become worked down so fine that it does not take much storage costs, or decline in the market, to eat up the profits, and jobbers prefer to do their business directly from the mill, and not take any chances on a rise or fall in values. As a rule the country trade has small stocks, and is buying moderately in consequence, but it is hard work to tempt any one with a round lot. Some popular brands of spring patents could be placed in 5,000 bbl lots in some instances, if the seller would come down about 10c below the hard pan price of the mill, but if such a bid was accepted, another lot of the same kind could not be sold except at 10c below the figures obtained before. There are numbers of large buyers who, while purchasing along as they need the goods, are willing, on what they think to be a safe market, to throw in a bid of about 10c below the price on a round lot, just for a feeler, but as a general rule there are not many that will do even this, since the trade has become so demoralized. Spring patents hold very steady, the range of sales being at about $4.85@5 for choice brands, with some flour as low as $4.75@4 80. With the present position of the freight market, Minneapolis mills are able to do better than many of the country mills in the way of price, and many of the latter are forced out of all competition in consequence. Some country mills will not offer below $4.90 @4 95, while on the other hand, some choice Minneapolis brands can be bought at $4 85. Winter wheats have not changed materially in price during the week, and have sold slow as a rule. Some houses have met with a fair call for Michigan and New York millers in a moderate way during the week, but it was to fill out assortments where they had become depleted.

On 'change there has been a general feeling of quietness during the week, all kinds of business ruling moderate. The rejection of the petition of the Boston chamber of commerce to the inter-state commerce commission at Washington, requesting them to make the freight rates to Boston on the same basis as to New York, is causing considerable disgust here. This subject attracts about all of the attention at present, as the trade cannot see the justice of having to pay 5c per cwt more freight for 1,000 miles, than New York has to pay for 950 miles. This difference tends to injure business here to a great extent, especially on corn, as dealers can only compete for the local trade, and this is necessarily small. At present export goods have to be sent out as such, and a higher freight rate is charged if the goods are stopped off here for the local trade. So it is impossible to export from the local market in competition with New York and the west, owing to the higher rate of freight charged. If the market happens to be overstocked with local goods, it cannot be sent out of the country to relieve the situation without the export price should happen to be high enough to warrant this extra cost, which is seldom the case, so dealers have to curtail their operations accordingly. With freights here on the basis of the New York rate, much relief would be felt, but it seems that it was not to be.

BUNKER.

Boston, Feb. 8.

OUR DUST COLLECTOR.

March 6 is the date fixed for the sale of the mill at Duluth at sheriff's sale.

Samuel D. Langtree, of Langtree, McGuire & Co., Aurora, Ind., is dead.

E. D. Kellogg, operating a mill at Wrightstown, Wis., has been burned out.

M. C. Moores, in the milling business at Bryan and Montpelier, O., has assigned.

Little & Co., Duluth coal, lumber and coarse grain dealers, have suspended.

The brick mill of Williams & Dwell, at Venice, O, was burned Feb. 14. Loss, $35,000; insurance, $14,500.

The new mill of the Jackson County Milling Co., at Black River Falls, Wis., was started up for the first time Feb. 14.

On the evening of Feb. 17, the mill owned by Marshall & Son at Sand Lake, Mich., was burned. Loss, $3,500; insurance, $2,500.

The cabinet council at Rome has decided to introduce in the Italian parliament a bill increasing the duty on cereals 58 to 96c.

The Kristine roller mill at Hanna, Ind., owned by Couder Bros. & Marks, was burned on the night of Feb. 14. Loss, $32,000; insured for $13,000.

C. B. Robinson, a miller at Princeton, N. J., has been burned out; insured. Also John Sprankle, Osnaburg, O. Loss, $1,200; insurance, $2,000.

C. F. Davis, an old resident of St. Cloud, Minn., died Feb. 16, aged 70 years. He was formerly owner of a flouring mill at Clearwater, Wright county.

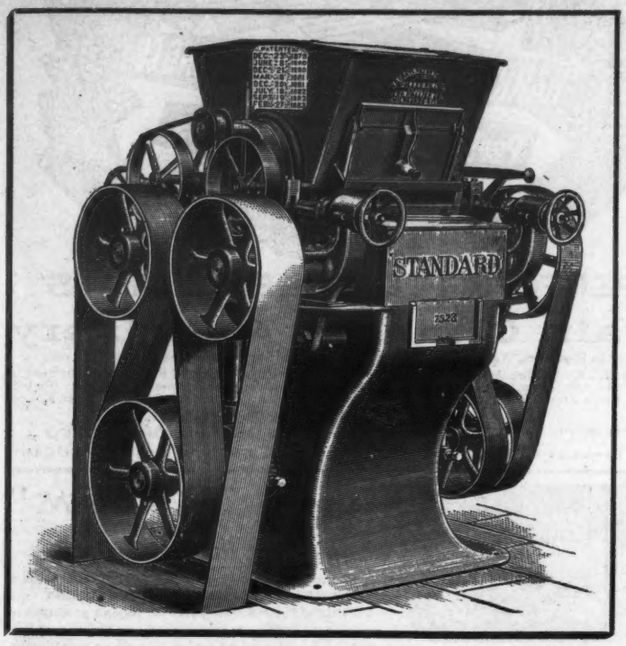
Representative Hatch, of Missouri, introduced a bill in congress to prohibit fictitious and gambling transactions in articles produced by the American farmers.

The Argentine Republic exported in the year 1887 no less than 8,000,000 bus of wheat, of which a material proportion was shipped to the United Kingdom. The crop now harvesting is not expected to allow of such a heavy trade in 1888; at the same time a very fair quantity will be available for export.

The new schedule of storage charges, as recently reduced by Chicago elevators, is as follows: on all grain received in bulk, and inspected in good condition, ⅛c per bu for the first 10 days or part of same, and ⅛c per bu for each additional 10 days or part of same, so long as it remains in good condition. On all grain in store on the 15th day of April, 1888, on which the existing winter rates shall have fully accrued, further storage charges, after such date, will be at the rate of ⅛c per bu for each 10 days or part thereof. On grain damp or liable to early damage as indicated by its inspection when received, 2c per bu for the first 10 days or part of same, and ⅛c for each additional five days or part thereof. In addition to the abolition of the special winter charges, or for the period from Nov. 15 to April 15, rate, the new schedule makes a reduction of one half, or ⅛c per bu for every 10 days or part thereof the grain remains in store after the first ten days. The new rate for the first storage of 10 days is the same as the old rate, or ⅛c per bu.

The Baltimore *Manufacturers' Record* has entered its thirteenth volume and is larger, better and more prosperous than ever. Its proprietors are enterprising men and are making it one of the leading trade journals of the country.

Gray's · Patent · Noiseless · Belt



ROLLER MILLS

(LICENSED BY THE CONSOLIDATED ROLLER MILL CO.)

THE ORIGINAL AND BEST SOLID IRON FRAME MILL.

25,000 PAIRS

ARE NOW IN USE.

There are more machines of this make in use than of all other makes combined.

SEND FOR OUR CATALOGUE AND PRICE LIST.

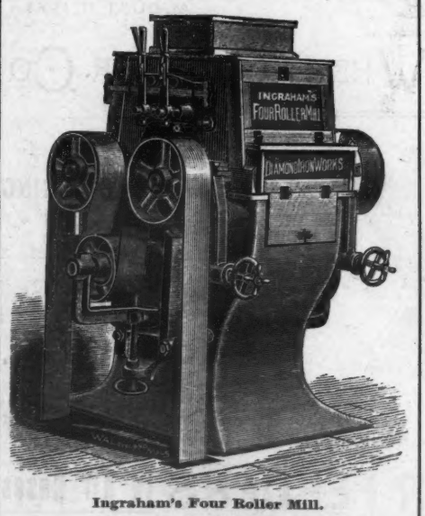
Sole Manufacturers, **EDW. P. ALLIS & CO.**

Reliance Works, Milwaukee, Wis.

The Largest and Best Equipped

MILLBUILDING AND FURNISHING ESTABLISHMENT IN THE NORTHWEST.

OPINIONS OF GOOD MILLERS.



Ingraham's Four Roller Mill.

9 x 18

Minneapolis, Minn., Dec. 17, 1887.

Smith & Richardson, City.

In reply to yours of the 14th, I can say that after running your feed roll eight months it has given entire satisfaction, and I believe it has no equal for grinding feed, etc.

Yours truly, E. COOLEY.

9 x 18

9 x 18

Wells, Minn., Jan. 4, 1887.

Smith & Richardson, Minneapolis, Minn.

Gentlemen: We bought one of your 9x18 three high roller mills last October, and have used it for corn meal. Graham and all kinds of feed and find it *perfection* itself. In fact it is the best mill I ever used, and do not hesitate to recommend it to any one in want of a mill for above use. We also think it would be a good mill for first and second breaks in a small mill. We run it to its full capacity, and find by actual test it takes only six horse power to run it. Yours truly,

KETZEBACK & THOMPSON.

6 x 18

Office of the Lion Roller Mill,
Braudon, Minn., Nov. 7, 1887.

Diamond Iron Works, Minneapolis, Minn.

Gentlemen: In reply to your inquiry as to how we like your 6x18 three high roller mill for grinding feed, corn, etc., will say it has been running about six weeks and is giving the best of satisfaction. For capacity I believe it has no equal. We can grind from 30 to 40 bus per hour and grind it fine. Can make Graham and corn meal in great style. We never have any trouble with belts slipping. We think it has the best differential of any roll in the market.

A. B. WENTWORTH, Lessee of Mill.

Testified by Farmers' Milling Association.

O. F. OLSON, President.

HUGO LINDBOHM, Secretary.

6 x 18

Ingraham's Three High Roller Mill—Style A.

DIAMOND IRON WORKS,

SMITH & RICHARDSON, Proprietors. MINNEAPOLIS, MINN.

PRACTICAL POINTS ON FALL WHEAT MILLING

In my last letter I spoke of the advantages to be gained if the mill was built so the miller could keep it under complete control. I dwelt at some length upon the state of the atmosphere as an important element in milling, which has not received the attention that it deserves. Some will say that it would require an elaborate arrangement of steam conductors, or hot air flues, and the expense of building a mill of this character would not be warranted, for the product from a mill such as I indicate could not be sold for a price commensurate with the outlay. Millers, like others of the human race, are often beset with strange delusions, and it will only be after serious and constant reflection that the different problems toward the betterment of milling can be solved. We can see the trend milling has taken in the last ten years, and who would have dared to predict, ten years ago, the results we now see worked out in the first class mills of this country. No one who is at all conversant with advanced milling, will say that it is possible to make the same grade of flour with a mill in January that can be made in September, unless he has the proper appliances at hand enabling him to accommodate himself to the extremes of the weather. Shut a mill down on Saturday night in the winter, when every part of it is running to your entire satisfaction, and the different grades of flour are at high water mark. You are pleased yourself, and your customers, when they come to use these goods, are well satisfied, will indeed speak in praise of them. But when you start the mill Monday morning, the rolls are cold, the reels are in the same condition, the wheat cleaners break the wheat more than is desirable, and what is the effect? Experience has taught me that it will take from six to forty-eight hours before the different grades of flour are as good as they were when the mill was shut down on Saturday. But the horizon is brightening and there are now many signs indicating that this state of affairs will not exist much longer on the part of energetic and progressive millers, for many are now making laudable efforts to overcome these difficulties.

Every mill has a reputation for its different grades of flour, and I venture to assert that it did not establish its reputation upon the best flour it made of any particular grade, for the public will not give the miller credit for such fraction of superior quality, but there is a strong probability that it was on the flour which was very near the poorest it made of any particular grade or grades. Further, let a mill run for twenty-four hours, and for the last eighteen out of the twenty-four it shall make a flour from one to three shades in color and general character better than that made the first six hours of the twenty-four, and, astonishing as it may seem, the measure of the standard of the whole product of the twenty-four hours will be upon the flour made the first six hours. Let a mill firm once establish its reputation upon the uniformity of its different grades of flour, and maintain them, and it can successfully compete with any rival who fails to see the necessity of maintaining absolute uniformity in all of his different grades of flour, even if he should succeed in making a better grade or grades a large part of the time. Perfection has not been attained in any of the arts or sciences, but untiring endeavors are being made in all directions to excel, and he who sits quietly down with the feeling that all things will regulate themselves, will wake up some fair day to find that while he mused, others have taken advantage of all arrangements to overcome every difficulty, made slow but sure progress, and passed forward to take the sought for reward. An eminent writer has said: "Steady, persistent, intelligent work has surmounted more difficulties than the brilliant sallies of genius or the temporary spurts of men without an object."

A thought expressed in the *Scientific American* I take the liberty of using, with a little change: "There are not a few head millers in this country who are first class millers in every respect, but who in early life had not the advantages of a thorough education, which younger men may have had (and feel this very keenly), but they recognize that these young fellows may be made useful, especially as a detail for special investigation, and that they will make a good report, because they are well equipped for such work." Milling is being more and more worked on scientific principles. Mark you, the time is not far distant when it will take its place with the other sciences, and it will be found that in its advancement, which is surely taking place, no one man can possibly have a patent on any particular system.

Before I leave this part of my subject for another which I may name here (a proper selection of wheat as an important adjunct toward successful milling), I wish to call the attention of millers to a practice which has been adopted by a large number of millers, that of placing in each barrel of flour directions for keeping the dough at an even temperature of from 65 to 70 degrees, knowing the importance of so doing. But upon careful investigation on my part, I found to my astonishment that these same millers did not have in their mills a single assistance in the way of steam conductors, stoves, or anything else, to keep the mill at an even temperature during the manufacture of this same flour. The world moves just the same, and on this chaos of ideas the light of progress will surely shine, as indeed it has been already shining for some in a way which brings increase to their exchequer, as well as a smile upon the brow of each of their customers. J. R. REYNOLDS.

Jackson, Mich.

Thirteenth Semi-Annual Statement.

Millers' and Manufacturers' MUTUAL INSURANCE COMPANY,

MINNEAPOLIS, MINN.

State of Minnesota, Dep't of Insurance,
St. Paul, July 15, 1887.

E. R. BARNES, Esq., President.

On the 15th of this month I concluded an examination into the condition and affairs of your company, as shown by your books, on the 30th of June, 1887. The statement below is the result:

Amount of insurance in force	$6,094,639.52
Face value of premium notes	$390,649 77
Assessments collected on same	150,249 80
Net value of premium notes on hand	240,400 47
First Nat'l Bank stock, market value	6,500 00
Nicollet Nat'l Bank stock, m'k't value	6,300 00
Watertown Nat'l B'k st'k, m'k't value	9,010 00
State Nat'l Bank stock, market value	2,120 00
Mortgage loans	19,000 00
Collateral loans	25,100 00
Certificates of deposit [5 per cent]	10,944 00
Cash in treasurer's hands	4,657 56
Cash in office, $14.46, in bank, $1,597.87	1,553 33
Cash premiums in course of collection	4,930 00
Due from other companies	2,087 72
Ledger balances	1,402 25
Accrued interest	2,091 76
Total assets	$334,096 73
Office furniture, maps and supplies	2,587 76

LIABILITIES.

Losses adjusted and due	None.
Losses adjusted, not due	$ 1,264 85
Losses reported [estimated]	14,000 00
Due on salary account	291 76
Interest accrued on advance cash premiums [since paid]	1,500 00
Total liabilities	$ 17,156 22
Surplus under Minnesota laws	$316,940 51
Losses paid since organization	$207,280 26
Cash dividends past six months	6,535 78
Scrip dividends past six months	550 12

I can further state the fact, known to all the members of the company, that it has been managed with skill and ability, and the same conservative course pursued in the future can not but result in the best interest of all concerned.

CHAS. SHANDREW,
Insurance Commissioner.

Respectfully submitted,
C. E. SHOVE, Secretary.

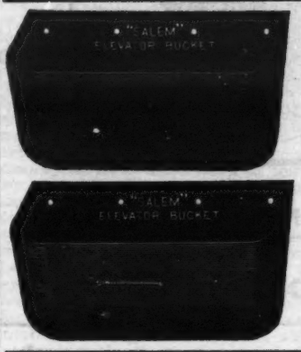
PERFORATED SHEET METALS
FOR ALL KINDS OF
Grain Cleaning Machinery

Used in Elevators, Warehouses, Flour and Rice Mills, Cotton and Linseed Oil Mills, etc.

Iron and Zinc for Rolling Screens, Corn Screens, Grain Dryers. Perforated Floors for Kilns used in Drying Oats, Corn, Fruit, etc. Smut Mill Jackets of all kinds and sizes made to order. We will Renew Your Sieves for Oat Separators, Receiving Riddles, Corn Screens, etc., at Short Notice.

SAMPLES AND PRICES ON APPLICATION.

BRANCH OFFICE: THE HARRINGTON & KING PERFORATING CO,
100 Beekman st., New York. Nos. 224 and 226 North Union St., CHICAGO



THE "SALEM"
IS THE
ORIGINAL ROUND CORNERED

Elevator Bucket, and ITS SHAPE is BROADLY COVERED by a FOUNDATION PATENT. All Buckets of the SAME SHAPE, though produced by a different process, trespass upon our rights and render DEALERS and USERS, as well as manufacturers, liable for damages. *Avoid infringements.* All legitimate "Salem" Buckets are plainly marked with the word

SALEM.

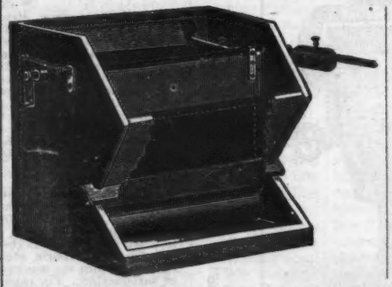
W. J. CLARK & CO., Sole Mfrs., Salem, O.
Thornburgh & Giessner, Gen'l Agents, Chicago.

CRAIG AUTOMATIC

PATENTED AUGUST 11, 1885.

MANUFACTURED BY THE CRAIG WHEAT CLEANER CO

OXFORD, MICH.



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WE HAVE SOLD DURING
• THE PAST YEAR •
OVER
4,700
MACHINES.

We offer $500 Reward for any stock in a Roller Mill that we cannot Feed in an **Absolutely Perfect Manner.**

We Guarantee OUR FEEDERS In All Cases
AND WILL SEND THEM ON
• THIRTY DAYS' TRIAL •

We wish to announce to the milling public that we protect our customers against any loss by reason of any infringement suits, as threatened by the Crescent Mfg. Co., of St. Louis, and we request all parties receiving such threatening letters to refer the St. Louis parties to us.

Craig Wheat Cleaner Co., : Oxford, Mich.

DOES·IT·PAY

: : : : TO USE THE : : : :

CYCLONE DUST COLLECTOR

3,500

NOW IN USE

SIMPLE

: : : AND : :

EFFECTIVE

PATENTED

: : IN THE : :

United States,
Dominion of Canada,
Great Britain,
Belgium,
France, Germany,
and Italy.

AN ACCURATE STATEMENT AFTER ONE YEAR'S USE.

THE KNICKERBOCKER CO., Jackson, Mich. GOSHEN, Ind., January 24, 1888.

Gentlemen: We have been using ten of your Cyclone Dust Collectors for something over a year, and we like them better than anything we ever used for the purpose. Our middlings are more even and much better purified than formerly, when we used the ———. By their use on our wheat cleaning machinery we have reduced our invisible loss one and one-half pounds to the barrel. This, on our output of 1887, of one hundred and fifteen thousand (115,000) barrels of flour, shows a clear saving of one hundred and seventy-two thousand (172,000) pounds, or eighty-six tons of feed that formerly was blown into the tail race. These figures are obtained from our manufactory record, carefully and accurately taken every day the mill runs.

Yours respectfully, (Signed) THE GOSHEN MILLING CO.
F. E. C. HAWKS, Sec'y.

FOR FURTHER TESTIMONIALS, PRICES, ETC., APPLY TO

The Knickerbocker Co., : Jackson, Mich.

Operating the C. C. WASHBURN Flouring Mills

CAPACITY,
7,500 Barrels Daily.

Washburn Crosby & Co.

MINNEAPOLIS, MINN.

MILLING SUPERLATIVE WHEAT BY THE MOST MODERN METHODS

WASHBURN'S SUPERLATIVE.
WASHBURN'S OOO.
WASHBURN'S OO.
WASHBURN'S GOLD MEDAL.

PRODUCING THE FOLLOWING BRANDS

WASHBURN'S SNOWDROP.
WASHBURN'S NO. 1.
WASHBURN'S IRON DUKE.
WASHBURN'S TRIPLE EXTRA.

ESTABLISHED 1846.

J. B. A. KERN & SON,

MERCHANT MILLERS

CAPACITY, 2,000 BARRELS PER DAY. MILWAUKEE, WIS.

MANUFACTURERS OF

Choice Minnesota and Dakota Hard Wheat Flour.

RYE-FLOUR

By most approved roller process. Guaranteed the best and purest Rye Flour manufactured.

We invite correspondence from cash buyers.

L. C. PORTER MILLING CO.,

WINONA, MINNESOTA.

MANUFACTURERS OF

The "BOSS" Flour.

(Copyrighted.)

Also Sugar Loaf, America's Finest, Standard and Cable Test.

CAPACITY, 1,500 bbls Daily. Quality guaranteed to have no superior.

Columbia Mill Co.

MINNEAPOLIS, MINN

COLUMBIA MILL CO. 196 COLUMBIA Roller Process PATENT MINNEAPOLIS, MINN.

THE above Company claims not only the most perfect mill, containing as it does all the most improved machinery invented up to the present time, but to produce a flour UNSURPASSED. This we GUARANTEE, it being made from SELECTED hard wheat grown in Minnesota and Dakota. We are buyers of the very finest samples of wheat that come to the leading spring wheat market of the world. We select only what is exactly suited to this class of milling, and therefore our guarantee MEANS SOMETHING. It is an acknowledged fact that in this flour a perfect separation of the glutinous particles of the wheat berry, and a thorough elimination of all weak and starchy matter, has at last been reached, and it is consequently more nutritious, yielding MORE BREAD TO THE BARREL than any other. The best trade admits that from its bread making qualities it is the cheapest as well as the best for either family or bakers' use, and unsurpassed, if equaled, by ANY FLOUR MADE IN THE UNITED STATES.

Capacity, 1,500 Bbls Per Day.

Brands	PATENTS: Columbia, Superlative, Best.	STRAIGHTS: Ceres, American.

FOR SAMPLES, QUOTATIONS, ETC., ADDRESS

COLUMBIA MILL COMPANY,

CABLE ADDRESS, "COLUMBIA, MINNEAPOLIS." MINNEAPOLIS, MINN., U. S. A.

[Copyrighted.]

AMERICAN FLOUR BRAND DIRECTORY.

DAKOTA.

North Dakota Roller Mills, Hillsboro.—*Patent:* Purity. *Straight:* Snow Ball. *Bakers':* Royal Flush.

ILLINOIS.

Sparks Milling Co. Alton.—*Patent:* Crystal. *Straights:* Armadale, Sparks' "C. A." *Clear:* Queen. EXPORT BRANDS—*Patent:* Crystal. *Straights:* Armadale, Electric Light. *Clear:* Queen. *Family:* Belle. *Low Grades:* Piasa, 888.

Wilcox & Hyde, Joliet.—*Leading Patents:* Diamond Crown, Boquet. *Straight:* High Loaf.

INDIANA.

McDaniel Bros. Franklin.—Perfection, Faultless, Extra.

The Goshen Milling Co. Goshen.—*Patents:* Our Best, No. 1 Patent, Elkhart *Straights:* Never Fail, Tip Top, Cook's Delight, Goshen's Choice. *Low Grades:* First Chance, Goshen Extra.

Blanton, Watson & Co. Indianapolis.—*Patents:* Princess, Crown Jewel. *Straights:* Diana, Queen Bess. *Export:* Hero, Darling.

Bush Milling Co. Seymour.—*Patents:* Copyright, "G. T. S." *Straights:* Success, Indiana. *Family:* Atlanta, Monogram.

KANSAS.

Newton Milling and Elevator Co. Newton.—*Patents:* Newton, Kansas, O. K., Extra, White Fawn. *Straights:* Niagara, Protector. *Low Grades:* Belle of Newton, Economy.

Inter-Ocean Mills, Page, Norton & Co. North Topeka.—*Patents:* Diamond, White Loaf. *Straights:* Reindeer, Buffalo. *Bakers':* Lone Star, Owl. *Low Grade:* Ruby, Boss.

Crosby Roller Milling Co. Topeka.—*Patents:* Crosby's Best, Crosby's AAA. *Straights:* Crosby's No. 1, Crosby's AA. *Bakers':* Crosby's Diamond, Crosby's A.

MARYLAND.

C. A. Gambrill Mfg. Co. Baltimore.—*Best Patent:* Patapsco Superlative. *Patent:* Patapsco Family. *Tropical Export Grade:* Chesapeake. *High Grade Extra:* Orange Grove.

MICHIGAN.

Albion Milling Co. Albion.—*Patent:* Albion. *Family and Bakers':* B. K. & Co., White Dove, White Roll, Tea Roll, Elite, Continental Star, Tidal Wave.

Valley City Milling Co. Grand Rapids.—*Roller Patents and Straights:* Roller Champion, Matchless, Lily White, Harvest Queen, Snow Flake, White Loaf.

F. W. Stock, Hillsdale.—*Patent:* Stock's New Process. *Straight:* (Litchfield) Diadem.

Walsh-De Roo Milling Co. Holland.—*Patents:* Sunlight, Electric Light. *Straights:* Daisy, Purity, Standard.

F. Thoman & Bro. Lansing.—*Brands:* Thoman's Gold Medal, White Rose and Family Favorite.

Stanton Milling Co. Stanton.—Fancy Patent, Magnet, Family.

MINNESOTA.

Otter Tail Mill, Fergus Falls.—Best, Family, Forty Per Cent.

Gardner Mill, Chas. Espenschied, Hastings.—*Choice Patent:* Axa, Hastings. *Patent:* Herald. *Family:* Vermilion. *Bakers':* Yosemite, Banner.

Cargill & Fall, Houston.—*Patents:* Superlative, Pure Gold (copyrighted). *Straights:* Snow Line, Mistletoe, Clarion. *Bakers':* Keno, Jim River.

Hubbard, R. D. & Co. Mankato.—*Patent:* Superlative. *Straights:* Crystal, Mankato. *Bakers':* Otsego.

Barber, D. R. & Son, Minneapolis.—*Patents:* White Satin, Barber's Best. *Straight:* Bon Ton. *Bakers':* Cataract, Amazon, Par Value, Thorn Hedge. *Low Grade:* Victoria.

Columbia Mill Co. Minneapolis.—*Patents:* Columbia, Superlative, Best. *Straights:* Manna, Puritan. *Bakers':* Ceres, American. *Low Grade:* Varna, Diamond X.

Galaxy Mill Co. Minneapolis.—*Patents:* Galaxy, White and Gold, Gold Medal. *Bakers':* Asteroid, Clear Grit, Noonday.

A. W. Krech & Co. Minneapolis.—*Patents:* Gold Dust, A. W. Krech's Superlative, Crystal Floss, Hoar Frost, Sparkling Gem, Satisfaction. *Bakers':* Gold Medal Inland, Climax, Gold Medal, Home, Champion, Clear Grit, Nokay.

Hinkle, Greenleaf & Co. Minneapolis.—*Patents:* Superlative, Supreme, Bonanza, St. A. Patent, Cosmos, Minnesota Chief. *Bakers':* Climax, Humboldt.

Morse & Sammis, Minneapolis.—*Patent:* Best. *Straight:* White Rose. *First Bakers':* Standard. *Second Bakers':* Arctic. *Export—First Bakers':* Front, Rank, Lightning. *Second Bakers':* Thunder. *Low Grade:* Pearl.

Pettit, Christian & Co. Minneapolis.—*Patents:* Christian's Superlative, Triple Ex, Perfection. *Bakers':* Christian's Extra, Irish Giant, Bakers' Extra. *Low Grade:* Regulator.

Pillsbury, Chas. A. & Co. Minneapolis.—*Patents:* Best, Success, Diamond. *Bakers':* Pillsbury, Straight.

Sidle Fletcher Holmes Co. Minneapolis.—*Patents:* Northwestern, Granulated, Corrugated, Minnehaha, Persian, Murray Hill. *Straights:* Daily Bread, Defiance. *Bakers':* Paragon, Stonewall.

Washburn, Crosby & Co. Minneapolis.—*Patents:* Washburn's Superlative, Gold Medal, Parisian, Triple Extra, Washburn's Extra, "000." *Bakers':* Snow Drop, Iron Duke, "No. 1."

Washburn Mill Co. Minneapolis.—*Patents:* AAAA, Washburn's Best, Royal Rose, Liberty Bell, Beacon Street, Fifth Avenue. *Straights:* Standard, Nonpareil. *Bakers':* Lincoln, Palisade, Sterling, Apex.

La Grange Mill, Red Wing.—*First Patents:* Star, Corner Stone. *Second Patents:* Chieftain, Old Glory. *Bakers':* Goodhue, War King. *Low Grade:* Onyx.

Winona Mill Co. Winona.—*Patents:* Laurel, Pinnacle. *Family:* Snow Drift. *Bakers':* Northern Light.

Porter, L. C. Milling Co. Winona.—*Patents:* The "Boss" Flour (copyrighted), America's Finest, Wenonah, Cream White, Sugar Loaf. *Straight:* Standard. *Bakers':* Cable Test, Strong Bakers', Cream of the West.

MISSOURI.

Plant, Geo. P. Milling Co. St. Louis.—*First Patents:* Sweet Home, Plant's A1 Patent. *Standard Patents:* Plant's Extra Patent, Maximum. *Best Straights:* Pilgrim, Victor, Favorite. *Extra Fancy:* Our W. J. S., Crusader. *Choice:* Gold Dust, Saratoga, Light Loaf.

NEBRASKA.

White & Glade, Crete.—WINTER WHEAT—*Patents:* Coronet, Winter Wheat Patent. *Straights:* Reliance, Silver Gloss. SPRING WHEAT—*Patents:* Victor, Santa Claus. *Straights:* Champion, Let Her Roll. *Bakers':* Sterling, Red R, Royal, Choice Family.

NEW YORK.

Central Milling Co. Buffalo.—*Patent:* Bridal Veil (trade-marked). *Bakers':* Conquest. *Low Grade:* Counterpane.

Schoellkopf & Mathews, Buffalo.—*Patents:* Niagara Falls, Brown's Patent, Surprise, Noble. *Bakers':* Ajax.

Urban & Co., Buffalo.—*Hard Wheat Patents:* Urban's Best, Crown of Gold, Pride of Manitoba. *Hard Wheat Straights:* S., White Bread, Wallula, Victor. *Hard Wheat Bakers':* White Oak, Roller B. *Winter Wheat Patents:* Pie Crust, Hungarian Patent. *Combination Family:* Pearl. *Winter Wheat Straights:* White Moss Rose, Ellicott, The Urban Cracker Flour, Clawson.

Empire State Mills, Syracuse.—*Patent:* Amos' Best. *Straight:* Charter Oak. *Bakers':* May Flower.

PENNSYLVANIA.

Market Street Milling Co. Philadelphia.—*Patents:* Peerless, Family Standard. *Bakers':* Superior Bakers'.

VIRGINIA.

The Haxall-Crenshaw Co., Haxall Mills, Richmond.—*Southern Winter Wheat Patents and Straights:* Byrd Island Patent Family, Haxall, Clara, Crenshaw. *Low Grades:* Tremont Super, Orange-Mills Fine.

WISCONSIN.

Kern, J. B. A. & Son, Milwaukee.—*Patents:* Success, Kern's. *Bakers':* Triumph, High Ground, Eagle. *Rye Brands:* A Rye, 1 Rye, Rye.

Globe Milling Co. Watertown.—*Patents:* Chromach's Superlative, Bunker Hill. *Bakers':* Tulip, Hekla, BBBB. *Straights:* Best Family, Choice Winter. *Export Grades:* White Fawn, Empire Export, Choice Bakers'.

Fountain City Milling Co. Fountain City.—*Patent:* Diamond. *Straight:* Atlas. *Bakers':* Crystal. *Low Grade:* Settlers' Choice.

Oriental Mills, John Schuette, Manitowoc.—*First Patent:* Oriental. *Second Patent:* Violet. *Straight:* Daisy. *Clear:* Best Family.

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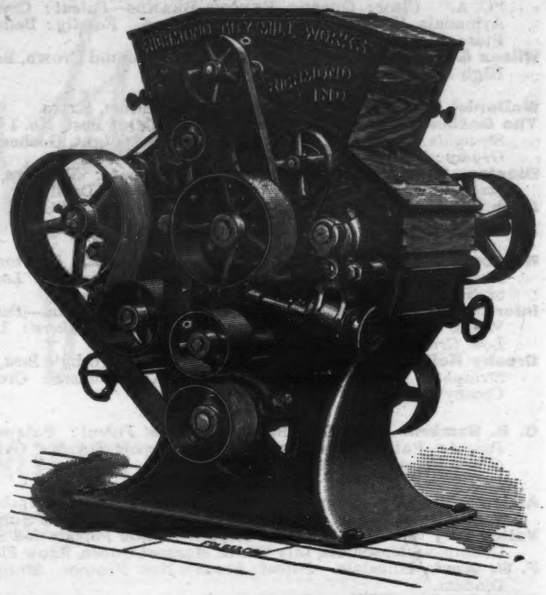

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Northwestern Agent,

218 Third Ave. South, Minneapolis, Minn.

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James Pye, Esq., Minneapolis, Minn.

Dear Sir: It is but just to you that we should say something in regard to the 50 bbl mill you built for us in August, 1886. We have had ample time to test it. The yield is four bushels, nineteen and one-fourth pounds, uncleaned wheat. The grade of flour is 65 per cent patent, 31 bakers' and 4 low grade, and our straight flour will compete with any patent flour made in the *world*. You put us up a 50 bbl mill, and we have made 100 bbls with it, and are running all the time on 85 bbls per day. To be plain with you, we are not only suited, but more than pleased with everything about the mill. We will compare flour with any mill. We have had several well posted mill men here to look over the mill, and they all say it is the model mill of Dakota. You exceeded your contract and spared no expense to give us a perfect mill, and you succeeded.

Yours respectfully,

THE WEBSTER ROLLER MILL CO.

T. A. Baker, Vice President and Manager.

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FLOUR MILL

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"FROM MILL TO MARKET."

Summarization of the Replies of Head Millers to Our Queries.

II.

The number of head millers whose replies were published in "From Mill to Market" in our Holiday Number, was 61, located in California, Colorado, Dakota, District of Columbia, Illinois, Indiana, Iowa, Kansas, Manitoba, Michigan, Minnesota, Missouri, Montana, Nebraska, New York, Ohio, Ontario, Pennsylvania, Tennessee, Texas, Wisconsin and Canada.

As was said at the time of publication, the questions put to the head millers were strongly of a "short system" trend, and possibly more so than was in the highest degree profitable. However, the amount and variety of opinion elicited with regard to this much debated new departure is extremely valuable in its way. And it is possible, viewed in this light, that the same space could not have been more profitably filled.

Question No. 1 was: "What can you say as to the progress of short system in your state?" Of the 61 millers answering, 8 reply that they know of no short milling in their state, and 7 state either, that there is none in the vicinity or that they have never seen it in their localities. Among the latter number, one Ontario miller comments that he does not believe it will succeed and thinks it a retrogression nearly to the old system. Another in the same province says there are some mills about him which are short from necessity because they are short of money, but none from choice, though he does not mean this as disrespect to short system advocates. Eight millers reply that in their states it is used more or less for small mills. Among this number an Illinois man states that it gains rather slowly in that state. One in Michigan says he does not know of a mill of 200 bbls using less than 5 breaks. Some 6 and 7 break mills have lately changed to 5, leaving reductions the same. Another Michigan miller says there are a few short mills near him but not of over 50 bbls and that they can not compete with longer system. An Ontario man on this list says the short mills he knows of are mainly for custom and local trade, and the same is said by a Tennessee miller who states that the short mills about him run from 1 to 4 reductions, mainly for local supply. Five millers say that short system progresses very slowly about them, one in District of Columbia stating that it is used only by millers of limited means, one in New York only by small mills. This latter miller further says he does not believe in the 2 break system. A Wisconsin man knows of only one short mill and that an experimental one at Watertown. Two head millers have not been located long enough to know, one of these, in New York, saying that he believes small mills are adopting short system thinking it theoretically correct, but he thinks the persuasive machinery man is responsible. Four millers can not say anything about the system, one in Minnesota never having seen it used on hard wheat, and another being against it. For the rest of the number one California miller thinks 1 or 2 mills in the state have adopted short systems. One in Colorado says the climate is so dry and the wheat consequently so brittle that it has to be well moistened before grinding. This makes it much more difficult to clean bran and greater break surface is necessary. Therefore short system is very little used. A second in the same state believes there are no mills in Colorado running under 3 breaks. In Illinois one man says nearly all the mills in the southern part of the state have adopted short system, though not many large ones. Another says several mills are adopting it in his vicinity (Alton) though he cannot speak for the whole state. Says the 5 break system is not a success, but that they seem to make very clean finish with 4 breaks and most mills are adopting that. A third, at Chester, same state, says there are only a few short system mills in his locality. Has had no experience himself nor much exchange of views with those using it, but believes in less breaks and more surface, or, in other words short system for making middlings—not for making flour direct. Says that he is making a medium grade flour which is selling side by side with short system flour and cannot supply demand. One Kansas man thinks the short system a humbug of deepest dye, created by mill machinery men to catch small millers. A second says that there are but 1 or 2 mills on that system in the state and none in his vicinity. Still another can say nothing favorable to it. There are 2 mills in his vicinity but neither has cleaning machinery or purifiers enough to make satisfactory work. Not much progress as yet is reported by a miller in Portage la Prairie, Manitoba, there being only one mill on 3 breaks that he knows of. This is doing fair work, principally for custom trade. Several small mills have 4 breaks. In Michigan one miller reports using 5 breaks. Tried 3 but prefers 5. A Minnesota man has had no experience but believes short system is right. Thinks 5 breaks on hard spring wheat enough. Round corrugation best for fife. A well known Minneapolis miller says the shortest system he ever worked on was 1 run of stone and a knock down bolt. There is now no milling of that sort in his locality and he thinks the tendency is away from short system rather than toward it. One Missouri miller says short system is at a standstill in that state, while another believes the tendency in the state is toward it. Thinks it has made considerable progress in a year, at first among smaller and now among the larger millers. Still another says the majority of the mills built are on the new system and that a number of old ones have changed to it. A St. Louis representative reports that quite a number of the country mills use short system and that two of the largest city mills have changed to it, while others are thinking of it. As among the Colorado mills, a Montana miller reports the wheat there too brittle for short system methods. Opinion in Nebraska differs somewhat, one miller stating that what he has seen of short milling is a success, but he knows of only 3 mills using it though there are a good many in the state. Another knows of no such mills in his locality (Milford) though there may be some. There was one at Roca, but it burned recently. He failed to get sample of flour, but dealers thought it no better than the family or third grade made in full roller mills thereabouts. A New York miller thinks the new system is gaining in favor every day. One in Ohio has tried it and don't care to make the change. A second reports that it has gained a firm foothold in Ohio and is being rapidly adopted by all progressive millers. A Pennsylvanian reports several mills already built for short work and others contemplated, but does not think they will succeed. Seem to work pretty well while new but don't clean up as they should nor can they with so short a method. In Texas, a Cleburne report states that there are very few in that part of the state. This miller has had no experience but notices that the flour ranking best is always from mills which make 14 to 16 reductions, 6 on wheat and 8 to 10 on middlings. A Mauston, Wis., miller can't say much about short system outside his own town. He runs one short system mill, doing good work on rye and buckwheat. The other works on long system, using wheat.

Asked in query No. 2 as to whether short system millers in the various localities represented are generally milling to make middlings or to make flour direct, we find that 19 millers believe they are milling for the latter to 8 for the former purpose. An Illinois miller of the larger class states that they make all the flour they can direct and at the same time have middlings sharp. A Kansas man thinks the short millers about him would like to finish from first break if they could. One in Michigan says they mill for flour direct regardless of quality or cost. Another in the same state says Michigan wheat is too soft to make middlings by short system. A Missourian believes they mill to make flour direct but do not thus succeed in diminishing the middlings to any great extent. A Nebraska man says they send cut-off from first break to low grade reel. An Ontario miller thinks they must mill for flour direct; otherwise it would only be short system on breaks. Five millers say there is no short system about them, 3 can't tell whether they mill for one or the other purpose, a Minneapolis miller says they *should* be milling to make money, 25 return no answer.

Question No. 3 asks whether short system, as understood, has had effect of increasing break surface on each break used? Those who think it has done so preponderate largely, being 37 to 6. A Salinas, Cal., miller says there are two short system methods; one making flour direct on wheat reductions, and the other largely increasing roll surface, thereby securing large percentage of middlings, and clean bran equal to any long system. A District of Columbia man believes it will take double the surface to come anywhere near long system work. One in Illinois thinks surface should be increased largely on main break on which 75 to 80 per cent flour and middlings are made, and proportionately on others. Another in the same state says it certainly does require more surface and that he knows of some 3 break mills with as much surface as others of 5 or 6. A third thinks the surface on each break must be greater if milling for middlings and a fourth says that a 4 break mill must have greater surface on second and third breaks and a 3 break mill on first and second. A Kansas man thinks short system must necessarily have greater break surface to get anything like satisfactory results. One in Manitoba believes short system ideas have set millers thinking and some are reducing output, which amounts to same as increasing break surface. In the opinion of one Michigan miller it is necessary to double or treble surface on first and second breaks, but not on those beyond. A second believes more break surface should be used, but says in majority of cases the miller has but little money (and less knowledge of milling) and the unscrupulous millfurnisher takes what he has and leaves him a mill but little better than the old system. Still another in the same state says in changing from 6 to 3 breaks they increased surface one-third. One Minnesota miller says break surface must be and another that it ought to be, increased. A St. Louis man thinks the fewer the breaks the greater the surface needed. For a 1,500 bbl mill with 4 breaks, using first for splitting wheat, there should be 13 double sets 9x24 rolls. Another Missouri opinion is to the effect that the main break is generally increased and that the same surface is employed on a 3 break short as on a 5 break long mill. One New York miller thinks it would be necessary to increase break surface unless speed were increased, which he thinks would be the proper thing to do. An Ontario representative says he thinks there is a tendency to increase both break and reduction surfaces, but does not specify that this is for short system. Among the 6 who do not think break surface is necessarily increased for short system, is one Dakota miller who says that nearly all millers are tending to increase roll surface or cut down output and he thinks short system has nothing to do with it. A Missouri miller says the 4 break mills have not increased the break surface formerly used with 6 breaks, and another in Ohio thinks that there is no need of more break surface when enough has been used on long system. It would appear from these 3 answers, however, that since the long system surface is not decreased for short system work, the proportion is greater and that these answers should really come under the opposite head. Three millers state that they are not posted with regard to short system requirements and 14 send no answer.

Questioned in No. 4, as to what effect short system has on capacity, we find 25 out of the 61 millers who think it increases, while 6 think it decreases capacity. Of the first class an Indiana miller says it increases capacity where power is limited. A Michigan man comments in addition that it makes the flour softer, not so good in bread but handsome in dust. A Missourian believes capacity is increased about one-fourth with same surface. A New York man says from one-fourth to one-third with same machinery, while an Ohio miller puts it at from 10 to 25 per cent. A well known Tennessee miller states that in milling for flour direct the capacity is increased materially, decreasing as desire for middlings increases. Of the 6 who believe it decreases capacity, a Kansas man thinks short system is not making as much flour as was formerly made on stones. One in Missouri says capacity is decreased 25 per cent where wheat is tough, but otherwise short system works splendidly. There are 7 millers who believe little or no difference is made by the change. Of these, one in Colorado says the output is not materially lessened by 4 breaks instead of 6. A District of Columbia man believes capacity cannot be increased and make a finish equal to long milling. One Michigan miller says if he changed to short system he should not expect more capacity but better flour and better yield. Aside from these three classes of opinions, a California miller comments that when used to make flour direct, short system produces too great a volume of stock on finishing rolls or tail end of mill. One in Ontario believes that if short system increases capacity it would be at sacrifice of quality and yield. Another, in Wisconsin, thinks it would increase break and decrease patent flour. There are also 3 millers who say they do not know what the effect would be, and 17 who do not answer.

There are 30 millers of the 61 who think short system products not suitable for market supplied by their mills. Three of these are emphatically certain of that fact, 1 prefers not to try the experiment, and 1 does not think them entirely satisfactory. On the other hand 18 regard them as being so, a Colorado miller making the proviso that they be milled for middlings, while one in Pennsylvania thinks they are to a certain extent suitable for family use and one in Tennessee in a measure, if yield admits. A Missourian is more confident and says they will suit anywhere. A North Springfield miller, in the same state, says there is no preference shown in his market. One in Illinois says that short system products don't hurt them any in their markets, by which we may perhaps infer that he thinks them not wholly acceptable. Eleven return no answer.

Question No. 6, was as to whether there is a tendency to lessen number of breaks on wheat, independent of short system idea. Opinion on this head is divided 27 for and 25 against. Of the former class a California miller thinks the tendency to reduce number of breaks does not imply lessening number of rolls or roll surface used on 5, 6 or 7 breaks. A Colorado man believes there is certainly a tendency of this sort especially in hard wheat and dry grinding sections where bran is more easily cleaned. In Illinois, one mill has changed from 7 to 5 breaks, with result of better flour, increased capacity and less steam used. An Iowa miller thinks 5 breaks will be the standard for long mills, while a colleague in Kansas believes there is a tendency to reduce from 7 and 8 to 5 at farthest. A Michigan miller who uses 5 breaks himself thinks very few mills of over 5 to 6 breaks will be built in future and still less using under 4 breaks. He believes in a medium and thinks with right cleaning machinery 4 breaks could be made successful. Another, same state, thinks number of breaks can not be reduced without lessening capacity unless the surface is increased on each break after the first. He knows of several millers using 4 or 5 breaks who are doing excellent work. A Minnesota man believes 5 breaks are plenty on hard wheat used there. His mill, in Fergus Falls, uses 7, which he thinks is unnecessary. Believes round corrugations best on hard wheat used there. In Missouri one miller thinks there is a general tendency to do more work than formerly on first breaks, 30

per cent on second break in short system and 75 to 80 on second and third in long. He thinks the tendency is toward making more flour than middlings. A Nebraska man advises 4 breaks on wheat; first break flour to low grade, second, third and fourth to bakers'. Four reductions on middlings, first patent to patent bin, second and third patents to bakers' and tail end to low grade reel. Thinks this short system has come to stay. In New York one man thinks 4 breaks on winter wheat will give better results than 7 as used in some mills; but he prefers 6 on spring. Another, same state, says every reduction means more or less direct flour. Economy means more break flour and less stock to smooth rolls. A third, at Seneca Falls, has observed quite a tendency to reduce the number of breaks in his locality, several having dropped from 6 and 7 to 5 or less. An Ohio man says there is an inclination to use fewer breaks among mills having 6 or more. One in Ontario writes to same effect, saying that 7 and 8 breaks are being dropped to 5 or 6, 6 being generally considered about right, or 7 when first is used as splitting operation. A Texas man thinks 5 breaks with ample surface better than 6 or 8, short surface. Another, same state, says while the tendency is to reduce number of breaks, more surface is needed to avoid crowding and to secure thin even feeding. Among the 24 millers who do not notice a tendency to reduce breaks, is an Illinois miller who thinks a 5 break mill in good condition will make as good if not better flour than a 3 or 4 break mill, but if he had to build would prefer 4. This statement, however, is somewhat ambiguous and appears rather to lean to less breaks. A Minnesota man would increase from 6 breaks to 7 and 8. Another states that some mills are inclined to reduce, but as a whole not. One in New York thinks there is no tendency to reduce below 6, while an Ontario miller agrees with this, saying that those who reduce below 5 or 6 to 3 or 4 have done so to cheapen plant. Another Ontario man would incline to increase rather than cut down. The same mind is held by a Pennsylvania miller who says if separations are made correctly and breaks handled right the more the better, as middlings are more even and can be made so. With short or few breaks the middlings are not granular enough. A second opinion from this state is that the best posted millers do not see fit to reduce number of breaks. In Tennessee one miller says the tendency of several 6 break mills he knows is to add one and further increase intermediate breaks by new application or speed. Aside from these 2 classes who would or would not reduce number of breaks, there is an Illinois miller who says it depends on quality of wheat. They get about same results in his section (Marshall) from 5 breaks as in others from 6. Good millers are using nothing less than 5. A Kansas man says on some kinds of wheat less than 6 will do, but on that grown there this year nothing less works as well, as it is very tough and hard to handle. In Manitoba 1 miller reports some tendency to reduce breaks on mills of small capacity, and running principally on custom work, but that those making greatest amount of flour use 5 to 7 breaks. There are also 6 who do not answer the question.

Question No. 7 related to a preference for soft vs granular flour. We find 39 millers who report demand for granular flour against 8 for medium and 6 for soft. Of the largest class 1 Ohio and 1 Texas miller state that flour must be very fine, 1 in Ontario says granular is preferred if color is good and another, same province, that soft is wanted sometimes. Of the 6 who find soft most wanted, a Missouri mill adds "for southern markets." There are 7 who make more conditional replies, 1 in Illinois, that soft flour is wanted in the south and granular in the east, 1 in Michigan, clear and not too fine flour, 1 in Missouri, soft and medium, another, same state, that granular is most in demand but soft is wanted for family use, a third, that it depends on where flour goes. A New York miller states that soft is wanted for household use and granular for bakers'. One in Pennsylvania says granular flour is wanted in the east and soft at home. One miller does not reply.

Asked in question No. 8, as to what kind of flour short system makes, whether soft or granular, 26 millers reply that it makes soft, soft and not very lively, soft and uneven, very soft and white, very soft with bluish cast, etc. There are 3 who think either soft or granular flour can be made as desired, and another, an Illinois miller, has about the same opinion, saying that it depends on management and kind of rolls. A Manitoba miller thinks not quite so granular as long; 1 in Minnesota, uneven; another, same state, good—rather soft. A Missouri man says good when properly milled; a second, smooth, white, rather soft; a third clear, white, smooth, and a fourth sees very little difference between products of the two processes. A New York miller considers short system flour very dark, 1 in Ontario says when granular it is off color and when good color it is too soft. A Pennsylvanian says what he has seen seemed good. Four millers have not had enough experience with short system to know, and 17 do not answer.

Question No. 9 asks as to a tendency toward discarding the old hexagon reel. Of the 61 millers, 38 report such a tendency, while 16 say that it is not manifest, or but slightly manifest with them. Two report the partial use of the old hexagon, a New York miller says there is some talk, but little action there toward discarding it, 1 miller can't tell what the tendency is in his vicinity, and 8 return no answer.

Question No. 10, asked what kind of reel was being adopted in place of the hexagon, whether centrifugal, round, inter-elevator, Morse or combination of these. Ten millers report a combination, 1 in Illinois naming centrifugal, round and inter-elevator as the new reels while the old hexagon still has a place there. A second in the same state reports use of all except the Morse. A Michigan miller says they use all kinds in combination with old hexagon. Thinks all have a place in a first class mill and that no one kind is suitable for all work. A second Michigan miller says all kinds are used with the preference for centrifugals. A New Yorker reports all kinds being adopted, but personally favors round reels for all but low grade stock, on which he would use centrifugals. A Pennsylvanian favors a combination for all kinds of work but thinks the Morse the finest flour dresser he ever handled. A miller in Tennessee says all kinds are used there, but the inter-elevator and inclined sieve are favored for rebolting. Nine millers report that the centrifugal is the favorite in their sections. One of these, in Iowa, says some Morse bolts are used in western part of state. A Missourian reports also the use of quite a number of round reels which are succeeding excellently. An Ontario man says centrifugals with a round reel before them to scalp stock are popular in that province. Seven mills pronounce in favor of round reels, one, in District of Columbia, stating that they are used there in combination with hexagon. Several objections are held there to centrifugals. Seven mills reply that the old hexagon is mostly used with them and this is probably the case with most of the 9 who do not reply. Two report a predominant use of the inter elevator or Morse bolt, one Kansas miller saying that he regards the Morse, for work and economy of power, ahead of all bolting devices, except for scalping. Two millers state that all kinds are used about them, one, a Texas man, expressing his preference for smooth round reels for breaks and centrifugals for light stock. Of the rest, a California miller says the Morse and different makes of centrifugals are combined with the hexagon there. Three report the use of round centrifugals with the Morse and sometimes a combination of all. Three others use centrifugals and round inter-elevator bolts; a third trio centrifugals and round reels of all kinds. Two say that each make has its advocates with them, one of these, an Ohio man, reporting round reels somewhat ahead. A Michigan miller uses Mills' reel and prefers it for all but very soft stock, on which would use centrifugal. One in Nebraska finds Mills', Gray's and Geo. T. Smith machines mostly employed. A Texan favors Smith centrifugals and Success flour dressers.

Questioned as to what is considered a good yield, in No. 11, a California miller replies that yields in his section are equal to any mills east of the mountains using best Scotch fife. One of two Colorado mills replies 4:40 and the other 4:24½ to 4: 0½ of first grade flour. One Dakota miller says 4:35 one 4:40, and a third 4:30, for bakers' and patent, not reckoning in 6 per cent for low grades. A District of Columbia man says 4:25, one in Illinois 4:30, a second the same, from strictly No. 2 wheat; a third 4:40 this year, owing to poor wheat, but formerly 4:30@4:35; a fourth 4:25, a fifth 4:30 and a sixth 4:20, as wheat comes from wagon. An Indiana miller says 4:40@4:54. One Iowa man says 5, making a XXXX brand and taking wheat as it comes from farmer. Could make it from 4:30 if wheat was clean enough for No. 2. Another, same state, says 4:35, and a third 4:15. One Kansas man reports 4:54, one 4:35@4:50, and another 4:30. A Manitoba miller puts it at 4:20. Two in Michigan say 4:30. In Minnesota one report is 4:40, without low grade, and 4:20 with, one 4:10, one 4:20, one 4:25, and three others 4:30, 4:30@4:35 and 4:30@4:40, respectively. One Missouri man says 4:27 and three 4:30. In Nebraska three millers think 4:25@4:30, 4:30@4:45 and 5, respectively. Five New Yorkers report 4:20@4 25, 4:23, 4:25@4:30, 4:30 and 4:30, respectively. An Ohio man says 4:30. In Ontario the yield runs 4:15, 4:20 and 4 20@4:30 in as many reports. One Pennsylvanian says 4:20, one 4:20@4:33, one 4:36, and a fourth 4:35@4:40. A Tennesseean says 4:30; one Texan 4:25@4.40, and another 4:30. Two Wisconsin men report 4:40. One Canadian says 4:18 and one 4:20. From these figures we may tabulate as below:

No. mills.	Yield.	No. mills.	Yield.
1	4:10	1	4:30 @4:45
2	4:15	1	4:30 @4:36
1	4:18	1	4:30 @4:40
7	4:20	1	4:30 @4:45
1	4:20 @4.35	2	4:35
1	4:20 @4:40	1	4:35 @4:40
1	4:23	1	4:35 @4:50
1	4 24½@4:30½	1	4:36
4	4:25	6	4:40
2	4:25 @4:30	1	4:40 @4:54
1	4:25 @4:40	1	4:54
1	4:27	2	5
16	4:30		

This gives an average of 4:36 bus per bbl for the 58 mills giving data. Two millers make no reply.

The average yield of the various sections is asked for in question No. 12. A Colorado miller says 4:54, two in Dakota, 4:45; one in District of Columbia 4:30; 5 in Illinois 4:23, 4:30, 4:35, 4:46 and 5, respectively, the latter adding that wheat is as it comes from the former. Two in Iowa say 4:20 and 4:45; three in Kansas, 4:32@4:40 4:54@5:10 and 5; one in Manitoba, 4:25@4:30; two in Michigan, 4:30@4:35 and one 4:35@4:40; four in Minnesota, 4:30, 4:40, 4:40 and 10, though the latter reply is ruled out in making the average as bordering on the satirical and facetious. Four Missouri men say 4:30@4:40, 4:32, 4:35 and 4:35; three in Nebraska, 4:45, 4:5- and 5; three in New York, 4:23, 4:30 4:55; two in Ohio, 4:37 and 4:38@4:40; three in Ontario, 4:28, 4:30 and 4:30@4:50; four in Pennsylvania, 4:30@5 4:40@4:43, 4:45 and 4:45; two in Texas, 4:30@4:40 and 4:56; one in Wisconsin, 4:45, and two in Canada, 4:30. From this we have:

No. mills.	Yield.	No. mills.	Yield.
1	4:20	3	4:35
1	4:23	1	4:35 @4:40
1	4:25@4:30	1	4:37
1	4:26	1	4: 8 @4:40
1	4:28	3	4:40
6	4:30	1	4:40 @4:43
1	4:3 @4:35	8	4:45
2	4:30@4:40	1	4:46
1	4: 0@4:50	2	4:54
1	4:30@5	1	4:54 @5:10
1	4:32	1	4:56
1	4:32@4:40	3	5

These figures give an average yield of 4:40. Three millers did not know the yield in their vicinity and one did not reply.

Question No. 13 asks as to the frequency and best manner of taking yields. We find 23 of 61 head millers who favor taking them daily or oftener. Several pronouncing in favor of 12 or 6 hour tests. A Colorado miller would use automatic scales and take a yield each shift. Would have test spout on scales and weigh a few drafts occasionally to guard against inaccuracy. Another Colorado man would take yield every night, he also using automatic scales. Count flour and weigh offal in hopper scales above bins. A Dakota miller would keep all products weighed as fast as milled. In addition to taking daily yields one Illinois miller would grind out every three or four months and figure up. He knows every morning the number of barrels flour, bran, shipstuff and screenings. Adds 5 lbs for waste which gives yield. For three years he has found waste 3-10 lb less than five. Another miller, same state, thinks it a good way to reckon up flour and offal every 24 hours, this giving a pretty accurate result save as to waste, which can be judged by the past. A third Illinois man would count up wheat from automatic scale above first break, flour from packers and offal. Would take a general yield at least four times yearly. A Kansas man takes yield at noon, but can take it at any time as products are all weighed. One Michigan miller uses the automatic scales on wheat and screenings, and counts flour carefully. Another would take yield daily with automatic scales, but if no conveniences are present, monthly at least. A Minnesota man prefers two daily yields if possible. Another would weigh all wheat into mill and take stock each day or as soon as flour is packed. One Missouri miller would weigh flour and offal and determine waste from past experience. Another would take yield each six hours. Weigh everything as fast as made, and clean up or grind out every 90 days. Still another takes a 12 hourly yield by taking amount of flour made. Bran and shipstuff is all sacked in equal weights. Allow so many pounds for waste. Each quarter takes yield on wheat bought and flour made. In Ontario one miller uses automatic scale on wheat and register on flour packers, for daily yield, taking general stock every 3 months. A Pennsylvania man weighs wheat into mill every day and weighs all products carefully. One in Tennessee takes a yield each 12 hours. Has registers on all flour and bran packers. Computes weight of products and adds known invisible loss. To prove, divide wheat stocks monthly and compare with office. A Texan has register on flour and bran packers and packs flour and offal as made. A Wisconsin man keeps record of wheat taken to mill and flour, bran and shorts (each separate) shipped out. Does this weekly if cannot daily. A Canadian would take yield daily if reliable automatic scale could be found; otherwise weekly on whole week's run. There are six millers who think a weekly test advisable, one of whom, an Illinois miller, weighs bran and middlings. A Minnesota man has a separate scale for weighing wheat before it is cleaned and grinds out every Sunday morning. Thinks there is no other accurate way. A Nebraska miller would have wheat weighed into mill with hopper scales, as he thinks no automatic scale is accurate. One in New York says when measured bins are used for storage it is easy to make weekly estimates, though a final footing should be made every few weeks. Such estimate can be made nearly correct, for in a year's run weekly estimates varied only ½ lb from actual results. An Ontario miller would take his yield at least weekly from wheat weigher into wheat cleaners. Screenings generally bring about the same price as shorts and will count only as so much offal. This will give cost per bbl as wheat comes in. Thinks daily yield misleading owing to changes in weather and condition of wheat. Thirteen millers would take monthly yields, some of them oftener if possible. An Illinois man would do this by carefully weighing wheat as it comes from farmers. Says this will show grain buyer the folly of buying too much inferior stuff. An Indiana man records wheat used and amount of flour and other products made. A Kansas miller of this class would take yields all the time if he could on

amounts of 1,000 bu runs. Another, who also prefers more frequent yields if practicable, would take one when changing wheat. Weigh from storage to cleaning bin, then by automatic scale over first break. One Minnesota miller who says "monthly or oftener" would clean out bins; run given quantity wheat that has gone over receiving separator through mill; divide lbs wheat by lbs flour; multiply by 196. A New York man would count sales and inventory stock. One in Ohio says he thinks yields should be taken monthly and at least twice a year. Takes one six times yearly himself. Another, same state, would make clear cut-off and grind out. A Pennsylvania miller thinks weather has too much to do with their milling to favor very frequent yield taking. He would, monthly, measure wheat for a run, say 12 bus, then weigh up, taking care to get wheat of an average quality and cleanliness. A Wisconsin man would use automatic scale to weigh all wheat and take test at end of month. At end of year figure up year's run and get average. There are six of them who favor 2 or 3 monthly tests, two of them oftener if possible. One Iowa miller of this number, would weigh in 1,000 or more bus direct from farmers' wagons; clean out mill before and after test and weigh everything. Another, same state, would weigh wheat after it is ground and, by weighing screenings and manufactured products, gain percentage. A third would weigh everything. A Nebraska man would grind all out and begin over. One in New York would weigh wheat as it come sfrom elevator, ascertaining number bus. Then, when flour is packed, number of bbls. Weigh bran, shorts, feed, etc., which will give correct yield and loss in manufacture. Three millers would take yield only twice per year, one of these in District of Columbia making proviso that he has a good, reliable miller. Would grind up, clean up and count up. Automatic scales not reliable. A Michigan man would take yield from inventory of mill's stock which shows, he says, just what mill has done. Says cash account has to go by this yield and it is the only real test. Parcels may show better but do not prove at end of year. A Nebraska miller of this class, takes grain as it comes from farmers' wagons, buying as it comes to market and not selecting. Weigh 1,000 bus, clean and begin on that. Weigh 1,000 more and when first is done use that, not stopping mill. Aside from those giving definite intervals of yield taking there are others who do not specify. A Dakota man says as often as can clean up. Keep account of every bu wheat brought into mill and every lb flour going out; and so, when the clean up comes, know where mill stands. He also runs special lots but finds them seldom accurate. Another, in Illinois thinks mill should be so arranged with hoppered bins that miller can grind out any time or make cut-off. Says this is the only absolutely reliable way. One Minnesota miller thinks frequency of yields should depend on amount of confidence placed in head miller. A New York man would take yield as often as he changes stock, weighing every part of output separately. Another, same state thinks the record of receipts and sales will show yields at any time and for any length of time. One in Ontario would take yield as often as convenient. Weigh wheat by responsible man and send to mill without knowledge of millers. Know that man on delivery floor is trustworthy. Trust not to automatic scales. A Pennsylvania miller's frequency of taking yields would depend on circumstances, but he would take them often and in a way to secure accuracy. Wheat should be weighed into mill and separate account kept of chess and screenings. One in Texas would keep account of flour and weight of bran and compare with weight of wheat. He finds automatic scales and packer registers great conveniences. To sum up we find twenty-three millers would take yields daily or oftener, six weekly, thirteen monthly, six once in 2 or 3 months, three twice yearly, nine who do not specify and two who do not answer.

The advisability of using all rolls as opposed to millstones partially for middlings, was discussed under No. 14. There are 32 millers who declare in favor of all rolls, three making the condition that they may have all the roll surface they want. Two allege greater economy of power and running expenses by their exclusive use; others say they are better on their wheat or on certain kinds of wheat. One Tennessee miller prefers all rolls unless the middlings are especially prepared for stones, when the latter can be satisfactorily used. Also endorses stones for red dog. As opposed to this view, 21 millers prefer some stone, mostly for pure middlings, saying that they can make a closer yield thus. Two would use all rolls on winter wheat, but think stones work well on spring middlings. An Illinois man says he would use millstones for perfectly clean middlings, but rolls are better on dirty stock. One in Indiana would use millstones if having an established trade, otherwise rolls. A Texan says all rolls are best for a medium sized mill, but for 600 bbls and up some stones are better. One miller don't know which is best and two do not answer.

The millers are asked in question No. 15, whether they believe there is a possibility of simplifying milling methods as they now exist. We find 37 out of the 61 who think there is such a possibility. A Colorado man thinks, however, that it will take time to develop. One in Illinois says the short system is a move in that direction, and that several devices now used will be improved in future. A second, same state, says the simplification will be in detail only—not as a whole. A third agrees with the first as to the simplifying effect of short system. A Kansas man thinks roll surface now used can not be much reduced, but looks for benefit from improved reels. Another, same state, thinks simplification possible, but don't believe in short system as now used. One in Manitoba believes in the feasibility of simplifying, but says tendency is not now that way. A Michigan miller says hard times and close milling will make millers think and devise improvements for themselves. A Minnesotian believes short system is a move in the right way. One in Missouri thinks milling grows more simple every day. Another looks for simpler methods, but far in the future. A New Yorker thinks it possible to simplify, but says the greatest trouble now is that most millers are trying to do too much with machinery they have. Another, same state, would recommend that the process be simplified after the middlings are made. An Ohio man thinks we are on high road to better milling system than ever used. One in Ontario says if perfect wheat cleaners were used less other machinery would be needed. A Texan believes flour will be made without either rolls or buhrs in the near future. A Canadian miller believes in simplifying, but deprecates cutting the animal's tail off just behind the ears. There are 19 millers who do not think processes can be made simpler and keep up present grades of flour. Two say the present process seems simple enough. Two that entirely different machinery and methods would have to be adopted to make it possible. One thinks more attention should be given to wheat cleaning. A Michigan man stands aloof from both classes and says there should be a happy medium between present systems. Four do not answer.

Questioned in No. 16, as to the desirability of operative organization and the advantages to be gained thereby, 21 millers reply that they favor it, many of these for exchange of ideas, some for mutual protection, sick benefits, insurance, etc., some for benefit in respect to wages. One or two favor such organization for improving the mind, but not on the Knights of Labor plan. Another thinks organization would benefit a few, as those who had money would get benefit and those who had not, promises. There are 18 millers who believe little or no benefit would result. One man in Illinois, does not favor organization of a few, but would favor a national association properly conducted. One in New York thinks a national organization would be clumsy to handle and that there is no sufficient cause for it. Says the milling journals will take care of it. A Texan thinks it would be impossible to form a national association, as it has failed previously. An Iowa miller says the distance between mills is too great. One in Missouri thinks it would not help as to wages but would give social benefits, at large milling points. A New Yorker does not believe much in labor organizations, as he says it is hard to get good men to join them and they are invariably run by the poorest of all. A Tennesseean sees no absolute need of it as yet. One Minnesota man thinks the benefit would depend on what the organization was for. Four have not thought about it or do not know, and 17 do not answer.

Question No. 17 asked for any remarks millers might see fit to make. A Colorado man explains that all his answers have been based upon the milling of wheat which has been moistened with 5 to 10 per cent of water and lain 12 to 36 hours before grinding, making it much more difficult to handle than if dry. Machines, especially feeding devices, have to be changed to suit their slow flouring and bulky break stock. A miller at Alton, Ill., says the mills there are all running day and night, crowded to full capacity, and everybody consequently happy. Says all like the NORTHWESTERN MILLER and wish it long life and success. A second, same state, thinks outlook for southern Illinois mills is better than for a number of years past though crop was below average. A third refers to the branding of flours. Believes if every millowner would stop selling flour unbranded and put his own name on every barrel he makes it would help the trade greatly. The firm he works for brands every barrel it makes with its own name. A fourth, same state, is surprised that seemingly intelligent men will try to carry the idea that better flour can be made on 3 breaks than on 6. Says the 3 break miller makes his flour direct from wheat. Give him 5 or 6 reductions, reducing wheat to middlings, plenty of purification and abundance of smooth roll surface, and the 3 break miller is too far behind to think of, but he hopes some day for the prodigal's return. Still another Illinois miller thinks milling schools should be opened and that they are more needed than anything else. Can not see why there is not more agitation for a school such as they had in Germany long ago. An Indiana man does not think it possible to make high grade flour without converting wheat to middlings and purifying before reduction. One in Kansas believes milling will improve when millowners use their own judgment, listen less to machinery tramps and study how to utilize what machinery they have before replacing with costly new, as an experiment. A Manitoba man says they are doing their best to push Minnesota flour out of Canadian markets and are doing it gradually. A Michigan miller says: "I have been reading your paper for last year or so, and have read all the short system talk and been considerably interested. I took a trip east and went through quite a large number of mills, but saw only two short ones and they were at Cleveland. One was not running and the one that was would not let me take samples to compare with other mills. So have not had much experience with that system and have been so busy with our own mill, trying to keep up with orders that I have had no time to experiment on my own account." Another, same state, says much might be said as to simplification of milling if space allowed. A third thinks good questions to ask would be regarding amount and kind of coal used per bbl, and exact net cost for making flour per bbl, taking one year with another, after all expenses of every kind, including salaries, etc., are paid and included. In Missouri, a St. Louis miller states that milling there is good and in any mill in that section, properly run and where head miller understands his business and attends to it, the owners are making some money. Another, same city, says milling there is better than for a number of years and outlook seems promising. A third says general trade is good and he thinks will be through this crop year. At North Springfield, same state, a miller states that he believes three break mills all well and good, but must say four breaks work better. Has been with three, five and six breaks, but thinks four take the lead. The miller can clean bran and shipstuff better without so much inconvenience with tough wheat. A Nebraska man says the secret of good milling is in the bolting and cleaning the wheat. The roller system is cleaning mechanism, the bolting reels separating and the purifiers purifying. The system all lies in silking the machines—any miller can grind. In New York one miller says he believes in long system with proper separations and thorough purifications. A second would like to see four grades of flour established: A spring patent, winter wheat patent, and a winter and spring straight with from 10 to 12 per cent low grade taken out. Would like to see an automatic flour packer invented that would weigh and tie sacks automatically, and, also, an automatic choke alarm which will report a choke to the miller at once without stopping flow of material for more than one minute. A third says: "Most of us are using too fine cloth on our reels when we know well enough that purer stock and coarser cloth will give more uniform flour and a much shorter cut to flour chest." A fourth thinks if an operative organization could be carried on without jealousy, or avarice, for benefit of operatives in an educational way, it would be a good thing; but hard to carry out. An Ontario miller says trade seems to be going to the larger and medium sized mills there. Small mills are gradually dying out and even those which changed over are not able to hold the trade. They are all making good flour at expense of yields and all finding that good flour and good yields must go together to make successful milling for money. A Texan believes the all roller mill much better than a combination of stones and rolls, but says an all roller mill can not be so short and must have long surfaces and enough machines to make exact separations. A Wisconsin miller, at Mauston, who runs two mills, says he has been very busy lately starting mill B on buckwheat on the short system on rolls, and that it works finely. In Canada, a Montreal miller writes that owing to a scarcity of wheat in some sections a good many Canadian mills will run very light this season, although on the whole, business will be much better than was expected a short time ago. Canada will have a surplus which will be exported chiefly in flour. Some 31 millers offer no remarks and 3 or 4 others only those of an explanatory nature.

THE BAKERIES.

John Donnelly, a baker of Pawtucket, R. I., has failed.

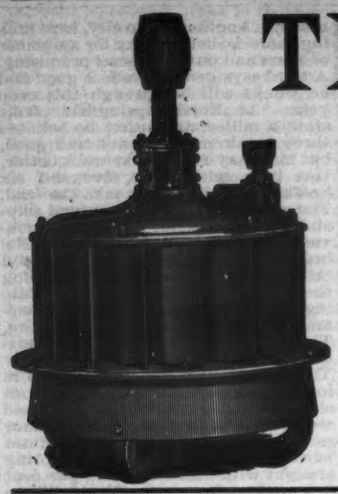
Lloyd & Worts, wholesale cracker bakers at Toledo, O., have been succeeded by Walter C. Lloyd.

A. L. Bauman & Bro. have succeeded A. L. Bauman in the wholesale cake and cracker bakery business at Dayton, O.

The Boston bakery firm of F. M. Doyle & Co. has been dissolved, and the business will be continued by Francis M. Doyle.

Ferdinand Ducius, proprietor of a French bakery at St. Paul, died Feb. 6 of paralysis. He was 49 years old and had lived in St. Paul 15 years. He was born in Germany. A wife and two children survive him.

A young man bought some pies at Goz's bakery in New York and offered a counterfeit bill in payment. The bill was handed back and the pies demanded. The man tried to run away with them, and when interfered with, shot both Mr. and Mrs. Goz several times. Both will probably die.



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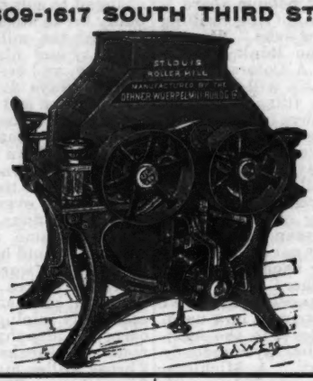

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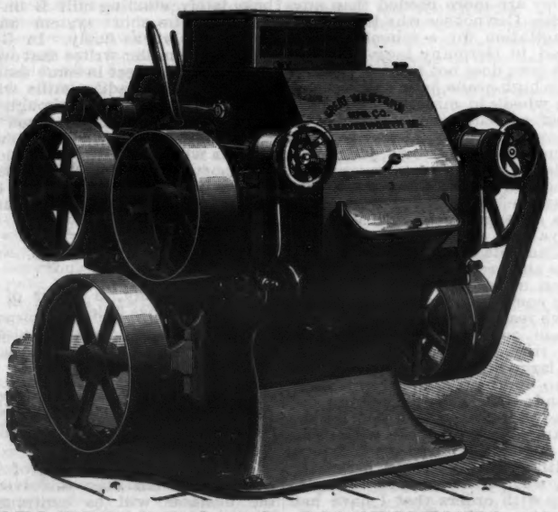

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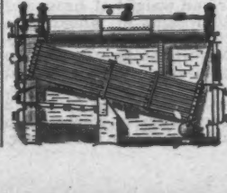

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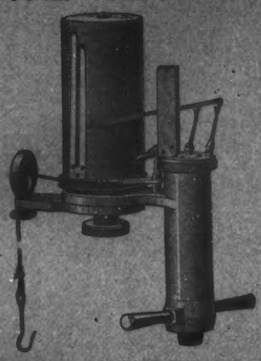

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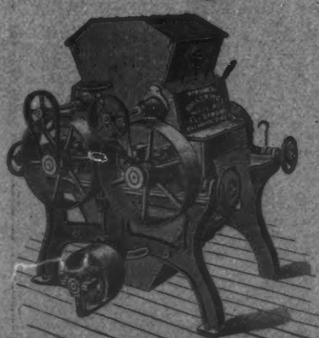

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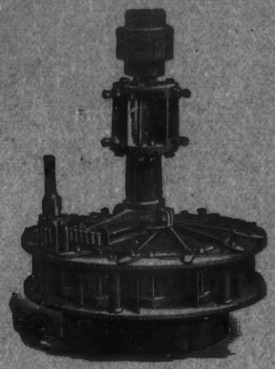

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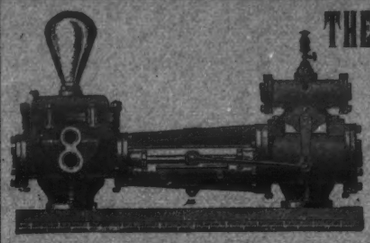

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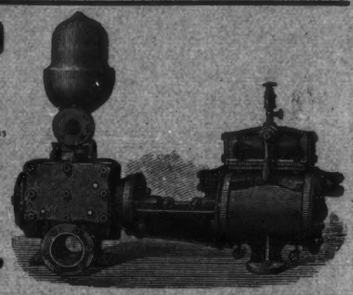

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